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Minimum DB
Maximum DB
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No.
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Maximum Match 100%
Listing first 45 summaries
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       Pred? No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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Gapop 10.0 , Gapext 0.5
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Match Length DB
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1: uniprot_sprot:*
2: uniprot_trembl:*
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    EACNLPIVRGPCIAFFPRWA.....QGNGNKFYSEKECREYCGVP
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    GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
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AMBP_MOUSE
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1 homo sapien
6 sus scrofa
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6 sus scrofa
8 bos taurus
5 equus cabal
6 mus musculu
9 mus musculu
1 mus musculu
1 mas musculu
7 meriones un
0 rattus norv
6 capra hircu
7 ovis aries
9 mesocricetu
0 cavis aries
9 mesocricetu
0 cavis apien
8 kenopus lae
8 xenopus lae
6 xenopus lae
6 xenopus lae
6 xenopus lae
7 kenopus lae
8 homo sapien
8 homo sapien
9 homo sapien
9 homo sapien
1 ancylostoma
1 ancylostoma
5 bitis gabon
1 anopheles
5 papio
8 sus scrofa
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AMBP HUMAN STANDARD; PRT; 352 AA. ID AMBP HUMAN STANDARD; PRT; 352 AA. AC P02760; P00977; P02759; DT 21-UUL-1986 (Rel. 01, Created) DT 13-AUG-1987 (Rel. 05, Last sequence update) DT 25-CCT-2004 (Rel. 45, Last annotation update) DE AMBP protein precursor [Contains: Alpha-1-microglobulin (Protein HC) DE (Complex-forming glycoprotein heterogeneous in charge) (Alpha-1 DE microglycoprotein); Inter-alpha-trypsin inhibitor light chain (ITI-LC) DE (Bikunin) (HI-30)].	KGKCVLFPYGGCQGNGNKFYSEKECREYCGVI	Query Match 90.0%; Score 296; DB 2; Length 151; Best Local Similarity 92.7%; Pred. No. 3e-27; Matches 51; Conservative 0; Mismatches 4; Indels 0; Gaps	InterPro; IPR002223; Prot Inh Kunz-m. Pfam; PF00014; Kunitz BPTI; 2. PRINTS; PR00759; BASICPTASE. PRODOm; PD000222; Prot Inh Kunz-m; 2. SMART: SM00131: KI: 7	Biol. Chem. Hoppe-Seyler 371: -!- SIMILARITY: Contains 2 BF/ EMBL; X54818; CAA38587.1; HSSP; P02760; 1BIK: GO: GO:0004867: F:serine-type	SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE=91214554; PubMed=17086 Vetr H., Gebhard W.; "Structure of the human alpha-		01-MAY-1997 (01-MAY-1997 (01-JUN-2003 (Alpha-1-micro Name=alpha-1-	RESULT 1 P78491 P78491 PRELIMINARY; PRT; 151 AA.	ALIGNMENTS	42 154 46.8 327 2 Q6IND9 Q6Ind9 xenopus Lae 43 153 46.5 55 1 CSTI BOMMO P81902 bombyx mori 44 153 46.5 76 2 Q8T7L9 Q8t719 bombyx mori 45 152 46.2 122 1 BTIA_BOOMI P83609 boophilus m	155 47.1 765 1 APP2 RAT P15943 ratt 154 46.8 195 2 Q9D8Q8 Q9d8q8 mus 154 46.8 252 1 SPT2 MOUSE Q9wn03 mus	155 47.1 763 1 APP2 HUMAN Q06481 home 155 47.1 763 2 Q71UIO Q71u10 home 155 47.1 763 2 Q61482 Q61482 Q61482	156 47.4 90 2 Q6T6S5 155 47.1 111 2 Q7M4L3 155 47.1 523 2 Q14594 155 47.1 751 2 Q60709	
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Name=AMBP; Synonyms=HCP, ITIL;

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RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RX Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RX Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RX Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RX Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RX Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RX Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RX Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RX Hopkins R.F., Jordan R., Bonaldo M.F., Casaavant T.L., Scheetz T.E.,
RX Stapleton M., Soares M.B., Bonaldo M.F., Casaavant T.L., Scheetz T.E.,
RX Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RX Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RX Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RX Brownstein M.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RX RA S.S., Loquellano N.A., Peters G.J., Malek J.A., Gunaratne P.H.,
RX RA S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RX RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RX Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RX Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RX Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RX Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RX RAHEY J., Hollow S., Schutz J., Myers R.M.,
RX Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RX Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RX Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RX Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RX Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RX Blakesley R.W., Jouchman J.W., Green E.D., Dickson M.C.,
RX Blakesley R.W., Touchman J.W., Schmutz J., Myers R.M.,
"Generation and initial analysis of more than 15,000 full-length human figure and mouse cDNA sequences.";

RX Blakesley R.W., Touchman J.W., Green E.D.,
                                                                                                                                                                                                            Lopez C., Grubb A.O., Mendez E.;
"The complete amino acid sequence of
glycoprotein heterogeneous in charge
individual.";
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Kaumeyer J.F., Polazzi J.O., Kotick M.P.;
"The mRNA for a proteinase inhibitor related to the HI-30 domain
inter-alpha-trypsin inhibitor also encodes alpha-1-microglobulin
(protein HC).";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa;
Mammalia; Eutheria;
      "Human protein HC displays acid sequence.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Traboni C., Cortese R.; "Sequence of a full length microglobulin).";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM
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MEDLINE=90336621; PubMed=1696200;
MEDLINE=90336621; PubMed=1696200;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE OF 1-220 FROM N.A. MEDLINE=86312901; PubMed=2428011;
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                                                                                                                          SEQUENCE OF
                                                                                                                                                                                                                                                                                                                                             SEQUENCE OF 20-202
MEDLINE=84126849; I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Structural analysis of the human inter-alpha-trypsin chain gene.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Structure of the human
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144:349-353 (1982)
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Primates;
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371:1185-1196(1990).
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"Kunitz-type proteinase inhibitors derived by limited price inter-alpha-trypsin inhibitor, V. Attachments of carl the human urinary trypsin inhibitor isolated by affinity chromatography.";
Hoppe-Seyler's Z. Physiol. Chem
                                           SEQUENCE OF 206-22:
MEDLINE=93232026;
Enghild J.J., Salv.
Hefta S.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Human inter-alpha-trypsin inhibitor: domains in the N-terminal part of the trypsin-like proteinase.";
Biol. Chem. Hoppe-Seyler 366:479-483(1
                                                                                                              Morelle W., Capon C., Balduyck M., Sautiere F
Michalski C., Fournet B., Mizon J.;
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chains of inter-alpha-trypsin inhibitor.";
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                                                                                                                                                                                                                                                  MEDLINE=20095837; PubMed=10631976; Berggard T., Cohen A., Persson P., Lindqvist A., Cedervall T., Silow M., Thogersen I.B., Jonsson J.A., Enghild J.J., Akerstroem "Alphal-microglobulin chromophores are located to three lysine residues semiburied in the lipocalin pocket and associated with a novel lipophilic compound."; Protein Sci. 8:2611-2620(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRUCTURE OF CARBOHYDRATES.

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"Location and characterization of the three carbohydrate prosthetic groups of human protein HC.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE OF 206-350.
MEDLINE=85225968; PubMed=2408638;
Reisinger P., Hochstrasser K., Albrecht
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               [8]
SEQUENCE OF 20-198.
MEDILINE=81184038; PubMed=6164372;
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"Presence of the protein-glycosaminoglycan-protein covalent in the inter-alpha-inhibitor-related proteinase inhibitor he 2/bikunin.";
                                                                                                                                                                                                                                                                                                                                                       BINDING TO CHROMOPHORE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "The reactive site of human amino-terminal half of the
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Chem. Hoppe-Seyler 366:19-21(1985).
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                                                         206-223, AND CROSS-LINK SI
32026; PubMed=7682553;
., Salvesen G., Thoegersen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hoppe-Seyler 366:479-483(1985)
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[17]
                                                                                                                                      20-MAR-1987 (Rel. 04, Created)
20-MAR-1987 (Rel. 04, Created)
01-FEB-1994 (Rel. 28, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
AMBP protein precursor [Contains: Alpha-1-microglobulin;
trypsin inhibitor light chain (ITI-LC) (Bikunin) (HI-30)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Akerstroem B., Loegdberg L., Berggard T., Osmark P., Lindqvist A "Alpha(1)-microglobulin: a yellow-brown lipocalin."; Biochim. Biophys. Acta 1482:172-184 (2010).
-i- FUNCTION: Alpha-1-microglobulin occurs in many physiological fluids including plasma, urine, and cerebrospinal fluid. It appears not only as a free monomer but also in complexes with
                                                                                                                                                                                                                                                   PIG
BIG
SEQUENCE FROM N.A.
MEDLINE=90353595; PubMed=1696914; DOI=10.1016/0014-5793(90)81112-2; Gebhard W., Schreitmueller T., Vetr H., Wachter E., Hochstrasser K.;
                                                                     Sus scrofa (Pig).
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                    Name=AMBP;
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MEDLLNE=98227321; PubMed=9566199; DOI=10.1006/jmbi.1997.1582;

Xu Y., Carr P.D., Guss J.M., Ollis D.L.;

"The crystal structure of bikunin from the inter-alpha-inhibitor complex: a serine protease inhibitor with two Kunitz domains.";

J. Mol. Biol. 276:955-966(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Chondroitin 4-sulfate covalently cross-links the blood protein pre-alpha-inhibitor.";
J. Biol. Chem. 266:747-751(1991).
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MEDLINE=91093267;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUBCELLULÄR LOCATION: Secreted.
TISSUB SPECIFICITY: Expressed by the 1
PTM: The precursor is proteolytically
separately functioning proteins.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FUNCTION: Inter-alpha-trypsin inhibitor, present in plasma and urine, inhibits trypsin, plasmin, and lysosomal granulocytic
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16199; DOI=10.1006/jmbi.1997.1582;
Ollis D.L.;
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DE CONTRE REPRESENTATION DE LA CONTRE PROPERTA DE CONTRE DE CONTRE PROPERTA DE CONTRE PRO
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                                                                     GO; GO:0005576; C:extracellular; ISS.
GO; GO:000586; C:plasma membrane; ISS.
GO; GO:0005886; C:plasma membrane; ISS.
GO:0004985; F:calcium channel inhibitor activity; I.
GO; GO:001985; F:calcium oxalate binding; ISS.
GO; GO:0019862; F:IGA binding; ISS.
GO; GO:0019862; F:IGA binding; ISS.
GO; GO:0019863; F:protein homodimerization activity; ISS.
GO; GO:003036; F:trypsin inhibitor activity; ISS.
GO; GO:0030304; F:trypsin inhibitor activity; ISS.
GO; GO:0030304; F:trypsin inhibitor activity; ISS.
GO; GO:003034; P:anti-inflammatory response; ISS.
GO; GO:0030236; P:anti-inflammatory response; ISS.
GO; GO:0030236; P:negative regulation of JNK cascade; I:GO; GO:0042167; P:negative regulation of JNK cascade; I:
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or send an email t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            between the Swiss Institute of Bioinformatics and the It the European Bioinformatics Institute. There are no rest use by non-profit institutions as long as its content modified and this statement is not removed. Usage by ar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hochstrasser K., Wachter E., Albrecht G.J., Reisinger P., "Kunitz-type proteinase inhibitors derived by limited proteolysis (the inter-alpha-trypsin inhibitor, X. The amino-acid sequences of (trypsin-released inhibitors from horse and pig inter-alpha-trypsin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE OF 212-33
MEDLINE=85225967;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            similarity).
SUBCELULIAR LOCATION: Secreted.
TISSUE SPECIFICITY: Expressed by the liver and E
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FUNCTION: Inter-alpha-trypsin inhibitor, present in urine, inhibits trypsin, plasmin, and lysosomal gran
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SIMILARITY: In the N-terminal sections.
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FUNCTION: Alpha-1-microglobulin occurs in many
fluide including plasma, urine, and cerebrospin
appears not only as a free monomer but also in
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and bikunin
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GO:0007565; P:pregnancy; ISS. erPro; IPR002968; A1-microglobln

immune respo
JNK cascade;

response; scade; ISS

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Best Local S
Matches 46
Bovinae; Bos.
NCBI_TaxID=9913;
[1]
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SIGNAL
CHAIN
                                                                                                                           AMBP_BOVIN STANDARD; PRT; 352 AA.

P00978; P35420; Q28020;
21-JUL-1986 (Rel. 01, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
AMBP protein precursor [Contains: Alpha-1-microglobulin;
trypsin inhibitor light chain (ITI-LC) (Bikunin) (HI-30)
(Cumulus extracellular matrix stabilizing factor) (ESF)].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DOMAIN
DOMAIN
                                                                                                                                                                                                                                                                                    BOVIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Prodom; PD000222; Prot_Inh_Kunz-m; SMART; SMO0131; KUJ; SMO0131; KUJ; SMO0131; KUNITZ_1; 2 PROSITE; PS00200; BPTI KUNITZ_1; 2 PROSITE; PS00213; LIPOÇALIN; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pfam; PF00061; Lipocalin; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  InterPro; IPR000566; Lipocln_cytFABP.
InterPro; IPR002223; Prot_Inh_Kunz-m.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Direct protein sequencing; Glycoprotein; Lipocalin; Plasma; Repeat; Serine protease inhibitor; Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRINTS; PR00759; BASICPTASE.
PRINTS; PR00179; LIPOCALIN.
                                                                                                                  Name=AMBP;
                                                         Mammalia;
                                                                         Eukaryota;
                                                                                              Bos taurus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                           IPR002345; Lipocalin.
IPR000566; Lipocln_cy
                                                         Eutheria;
                                                                           Metazoa;
                                                                                                                Synonyms=ITIL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          216
225
241
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272
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100
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                                                                                              (Bovine).
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272
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Cetartiodactyla; Ruminantia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  82.7%;
82.1%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-linked (GlcNAc...) (Potential).
N-linked (GlcNAc...).
Inhibitory (P1) (chymotrypsin, elasta:
Inhibitory (P1) (trypsin).
T -> M (in Ref. 2).
E -> Q (in Ref. 3).
S -> Q (in Ref. 3).
S -> Q (in Ref. 3).
G -> A (in Ref. 3).
FQ -> IR (in Ref. 3).
FQ -> K (in Ref. 3).
Q -> K (in Ref. 3).
C -> Q (in Ref. 3).
D -> C (in Ref. 3).
C -> C (in Ref. 3).
D -> C (in Ref. 3).
C -> C (in Ref. 3).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BPTI/Kunitz inhibitor 1
BPTI/Kunitz inhibitor 2
Chromophore (By similar Chromophore (By similar)
                                                                                                                                                                                                                                                                                                                                                                                                                               Score 272; DB
Pred. No. 4.4e
4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                 4.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1F630FF98E3CD70F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        similarity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    272; DB 1;
No. 4.4e-24;
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                                                        Vertebrata; Eute
minantia; Pecora;
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y similarity).
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y similarity).
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                                                         Euteleostomi;
cora; Bovidae;
                                                                                                                                                    Inter-alpha-
(BI-14)
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MEDLINE-92291130; PubMed=1376324; Chen L., Mao S.J.T., Larsen W.J.; "Identification of a factor in fetal cumulus extracellular matrix. A role trypsin inhibitor family."; Biol. Chem. 267:12380-12386(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Biol.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hochstrasser K., Albrecht G.J., Schoenberger O.L., Wachter B.;

"Kunitz-type proteinase inhibitors derived by limited proteolysis of
the inter-alpha-trypsin inhibitor, VII. Characterization of the bovine
inhibitor as double-headed trypsin-elastase inhibitor.";

Hoppe-Seyler's Z. Physiol. Chem. 364:1689-1696(1983).

-I-FUNCTION: Alpha-1-microglobulin occurs in many physiological
fluids including plasma, urine, and cerebrospinal fluid. It
appears not only as a free monomer but also in complexes with IgA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Kunitz-type proteinase inhibitors derived by limited proteolysis o the inter-alpha-trypsin inhibitor, VII. Determination of the aminoacid sequence of the trypsin-released inhibitor from bovine interalpha-trypsin inhibitor.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      trypsin-released inhibitors from
inhibitors.";
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Hochstrasser K., Wachter E., Albrecht G.J., Reisinger P.;
"Kunitz-type proteinase inhibitors derived by limited proteolysis of the inter-alpha-trypsin inhibitor, X. The amino-acid sequences of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lindqvist A., Aakerstroem B.;
"Bovine alpha 1-microglobulin/bikunin. Isolation a:
of liver cDNA and urinary alpha 1-microglobulin.";
Biochim. Biophys. Acta 1306:98-106(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A. TISSUE=Liver;
                                                                           This
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              +
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hoppe-Seyler's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hochstrasser K., Wachter E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=84133807;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE OF 206-219.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EACTIVE SITES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      urine, inhibiti
elastase.
FUNCTION: May o
s SWISS-PROT entry is copyright. It is produced through a collaboration ween the Swiss Institute of Bioinformatics and the EMBL outstation European Bioinformatics Institute. There are no restrictions on it by non-profit institutions as long as the company.
                                                                                                                                                                                                                             TISSUE SPECIFICITY: Expressed by the liver and EPTM: The precursor is protectly ideally processed separately functioning proteins.
PTM: Alpha-1-microglobulin contains covalently l
                                                                                                                                                                                                                                                                                                                                                                          stimulus to act as structural linker that ensure normal cumulus expansion, through stabilization of the cumulus extracellular matrix thus supporting the process of ovulation.

SUBUNIT: I-alpha-I plasma protease inhibitors are assembled from support or two heavy chains (H1, H2 or H3) and one light chain, bikunin. Inter-alpha-inhibitor (I-alpha-I) is composed of H1, H2 and bikunin, inter-alpha-like inhibitor (I-alpha-L1) of H2 and bikunin, and pre-alpha-inhibitor (P-alpha-I) of H3 and bikunin (I-alpha-I) of H3 an
                                                                                                                               SIMILARITY:
                                                                                                                                                                              chromophores
SIMILARITY: I
                                                                                                                                                                                                                                                                                                      SUBCELLULAR LOCATION: Secreted TISSUE SPECIFICITY: Expressed 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and albumin. FUNCTION: In
                                                                                                                                                                                                                                                                                                                                                          similarity).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chem. Hoppe-Seyler 366:473-478(1985).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    inhibits trypsin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Inter-alpha-trypsin inhibitor, present in plasma and hibits trypsin, plasmin, and lysosomal granulocytic

 Z. Physiol.

                                                                                                                               Contains 2 BPTI/Kunitz inhibitor domains
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                                                                                                                                                                                                           θy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PubMed=8611630;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     diffuse into
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                                                                                                                                                                                 the
                                                                                                                                                                                                           similarity)
                                                                                                                                                                                 N-terminal
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                                                                                                                                                                              section;
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Query Match
Best Local :
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InterPro; IPR001038; Calycin.
InterPro; IPR0010345; Lipocalin.
InterPro; IPR002345; Lipocalin.
InterPro; IPR002566; Lipocalin.
InterPro; IPR002563; Prot Inh Kunz-m.
Pfam; PF00014; Kunitz BPTT; 2.
Pfam; PF00061; Lipocalin; 1.
PFINTS; PR00759; BASICPTASE.
PRINTS; PR00759; LIPOCALIN.
PRINTS; PR00179; LIPOCALIN.
PRODOm; PD000222; Prot_Inh Kunz-m; 2.
SMART; SM00131; KU; 2.
PROSITE; PS00280; BPTI KUNITZ 1; 2.
PROSITE; PS00213; LIPOCALIN; I.
PROSITE; PS00213; LIPOCALIN; I.
PROSITE; PS00213; LIPOCALIN; I.
PROSITE; PS00213; LIPOCALIN; I.
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PIR; S68149; TIBOBI.
HSSP; P02760; IBIK.
GO; GO:0005576; C:extracellula
GO; GO:0005576; C:plasma membr
GO; GO:0005886; C:plasma membr
GO; GO:0019855; F:calcium oxal
GO; GO:0046904; F:calcium oxal
GO; GO:0020037; F:heme binding;
GO; GO:0030588; F:plasmin inhi
GO; GO:0030586; F:plasmin inhi
GO; GO:003036; F:trypsin inhi
GO; GO:003036; F:trypsin inhi
GO; GO:003036; F:anti-inflame
GO; GO:003036; P:anti-inflame
GO; GO:003036; P:anti-inflame
GO; GO:003037; P:heme catabol
GO; GO:0050777; P:negative reg
GO; GO:0050777; P:negative reg
GO; GO:0046329; P:negative reg
GO; GO:0046329; P:pregnancy; I
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GO; GO:0005886; C:plasma membrane; ISS.
GO; GO:0005886; C:plasma membrane; ISS.
GO; GO:0019855; F:calcium channel inhibitor activity; ISG.
GO:0020037; F:heme binding; ISS.
GO; GO:0020037; F:heme binding; ISS.
GO; GO:0019862; F:IGA binding; ISS.
GO; GO:0019862; F:IGA binding; ISS.
GO; GO:0030568; F:plasmin inhibitor activity; ISS.
GO; GO:0030568; F:protein homodimerization activity; ISS.
GO; GO:0030304; F:trypsin inhibitor activity; ISS.
GO; GO:0030304; F:trypsin inhibitor activity; ISS.
GO; GO:0030304; F:nrightammatory response; ISS.
GO; GO:0030236; P:anti-inflammatory response; ISS.
GO; GO:0030236; P:cell adhesion; ISS.
GO; GO:007155; P:cell adhesion; ISS.
GO; GO:007157; P:negative regulation of JNK cascade; ISG.
GO:0046329; P:negative regulation of JNK cascade; ISG.
GO:0007565; P:pregnancy; ISS.
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ترامh لاست
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                                              DB 1;
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whereas the second domain is a strong inhibitor of trypsin, the contains two homologous domains.

CC first domain interacts weakly with PMN-granulocytic elastase and contains the pancreatic elastase.

CC indictivation for secreted.

CC determine the specificity of the inhibition of domain I.

CC chymotrypsin and elastase; those with leucine interact weakly with CC chymotrypsin and elastase; those with leucine interact strongly.

CC inhibitors with methionine in this position interact weakly with contains 2 BPTI/Kunitz inhibitor domains.

DR HSSP; P02760; IBIK.

DR InterPro; IPR00223; Prot Inh Kunz-m.

Pfam; PR0014; Kunitz BPTI; 2.

DR PRODOM; PD000223; Prot Inh Kunz-m.

PRANTS; PR00759; BASICPTASB.

DR PRODOM; PR00131; KU1; 2.

DR PROSITE; PS00750.
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PROSITE; PS50279; BPTI KUNITZ 2; 2.
Direct protein sequencing; Glycoprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Veeraragavan K., Singh K., Wachter E., Hochstrasser "Characterization of a trypsin inhibitor from equine Biochem. Int. 26:405-413(1992).
-I- FUNCTION: This inhibitory fragment, released from the state of the state
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Mochstrasser K., Wachter B., Albrecht G.J., Reisinger P.;
"Kunitz-type proteinase inhibitors derived by limited proteolysis of the inter-alpha-trypsin inhibitor. X. The amino-acid sequences of the typesin-released inhibitors from horse and pig inter-alpha-trypsin trypsin-released inhibitors from horse and pig inter-alpha-trypsin
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MEDLINE-85225967; PubMed=2408637;
Hochstrasser K., Wachter E., Albr
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25-JAN-2005
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Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
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6, Last annotation update)
inhibitor (ITI) (HI-14) (
   MW.
                                                                N-linked (GlcNAc. . Q -> E (in Ref. 2).
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BPTI/Kunitz inhibitor 2.
Reactive bond for chymot
   CE79B4D801DF42D5 CRC64;
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Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                      Itoh H., Ide'H., Yoshihara H., Nawa Y.;

Lisubmitted (JAN-1994) to the EMBL/GenBank/DDBJ databases.

Lisubmitted (JAN-1994) to the EMBL/GenBank/DDBJ databases.

Control of the EMBL/GenBank/DDBJ databas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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AMBD MOUSE STANDARD; PRT; 349 AA.

Q07456; Q61294;

Q1-NOV-1997 (Rel. 35, Created)

Q1-NOV-1997 (Rel. 35, Last sequence update)

Q5-JUL-2004 (Rel. 44, Last annotation update)

AMBD protein precursor (Contains: Alpha-1-microglobulin; In AMBD protein inhabitor light chain (ITI-LC) (Bikunin) (HI-30)].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.

STRAIN-C57BL/6; TISSUE-Liver;

STRAIN-C57BL/6; PubMed=7533761;

MEDLINE=95189774; PubMed=7533761;

Itoh H., Ide H., Kataoka H., Tomita M., Yoshihara H., Nawa Y.;

"CDNA sequencing of mouse alpha 1-microglobulin/inter-alpha-trypsin
inhibitor light chain and its expression in acute inflammation.";

J. Biochem. 116:767-772(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN-BALB/C; TISSUE=Liver;

STRAIN-BALB/C; TISSUE=Liver;

MEDLINE=93363639; PubMed=7689339; DOI=10.1016/0167-4781(93)90115-T;

Chan P., Salier J.-P.;

"Mouse alpha-1-microglobulin/bikunin precursor: cDNA analysis, gene

"Mouse alpha-1-microglobulin/bikunin precursor: cDNA analysis, gene

"Mouse alpha-1-microglobulin/bikunin precursor: cDNA analysis, gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE OF 128-349 FROM N.A. STRAIN=C57BL/6; TISSUE=Liver;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Name=Ambp; Synonyms=Itil;
                                                                             between
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                                                                                                                                                                                                                                     SUBCELLULAR LOCATION: Secreted.
TISSUE SPECIFICITY: Expressed by the liver
PTM: The precursor is proteolytically proce
separately functioning proteins.
PTM: Alpha-1-microglobulin contains covalen
chromophores (By similarity).
ween the Swiss Institute of Bioinformat
Buropean Bioinformatics Institute. The
by non-profit institutions as long
ified and this statement is not removed.
                                                                                                                                                                                                                  SIMILARITY:
                        SWISS-PROT entry is copyright. It is produced through a collaboration en the Swiss Institute of Bioinformatics and the EMBL outstation European Bioinformatics Institute. There are no restrictions on it by non-profit institutions as long as its content is in no we
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              62
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Biophys. Acta 1174:195-200(1993)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
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78
                                                                                                                                                                                                               N-terminal section; belongs to the
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                                                                                                                                                             BPTI/Kunitz inhibitor domains.
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Pred. No. 1.6e-23
6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        precursor: cDNA analysis, gene the gene next to the orosomucoid
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| bikunin
                                                                                   a collaboration
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SEQUENCE
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SIGNAL
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InterPro;
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InterPro;
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GG; GO:0005586; C:extracellular; ISS.
GG; GO:0005886; C:plasma membrane; ISS.
GG; GO:0005886; C:plasma membrane! inhibitor activity; ISS.
GG; GO:0019855; F:calcium channel inhibitor activity; ISS.
GG; GO:0019862; F:ralcium oxalate binding; ISS.
GG; GO:0019862; F:ralcium oxalate binding; ISS.
GG; GO:0019862; F:ralcium oxalate binding; ISS.
GG; GO:0030568; F:plasmin inhibitor activity; ISS.
GG; GO:0030304; F:trypsin inhibitor activity; ISS.
GG; GO:0030304; F:trypsin inhibitor activity; ISS.
GG; GO:0030336; P:anti-inflammatory response; ISS.
GG; GO:0030336; P:anti-inflammatory issues; ISS.
GG; GO:0030736; P:heme catabolism; ISS.
GG; GO:0042167; P:heme catabolism; ISS.
GG; GO:0042167; P:negative regulation of immune response,
GG; GO:0046329; P:negative regulation of JNK cascade; IS;
GO:00007565; P:pregnancy; ISS.
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EMBL; D28812; BAA05973.1; -.
PIR; S35708; S35708.
                                                                                                                             SITE
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CARBOHYD
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                                                                                                                                                                                                                                                                              BINDING
                                                                                                                                                                                                                                                                                                                                                              CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                         Glycoprotein;
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PROSITE; PS50279;
PROSITE; PS00213;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SMART; SM00131; KU;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRINTS; PR00759; BASICPTASE. PRINTS; PR00179; LIPOCALIN.
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 285
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c) IPR002968; Al-mi---
c) IPR01038; Calycin.
co; IPR012345; Lipocalin.
ro; IPR002345; Lipocal cytrABP.
ro; IPR002223; Prot Inf Kunz-m.
ro; IPR002223; Prot Inf Kunz-m.
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                        N
                                                         Similarity
ACNLPIVQGPCRAFIKLMAFDAAQGKCIQFHYGGCKGNGNKFYSEKECKEYCGVP
            ACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP
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349
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136
148
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20
205
                                             Conservative
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; BPTI_KUNITZ_2;
; LIPOCALIN; 1.
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336
52
110
136
148
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202
349
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                                                                                                     53
                                                      79.3%;
78.2%;
                                                                                                                                                                                                                                                                                                                                                                                                          Plasma;
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                                           ; Score 261; DB
; Pred. No. 9.2e
5; Mismatches
                                                                                                                                                           By similarity.
N-linked (GlcNAc...
N-linked (GlcNAc...
N-linked (GlcNAc...
                                                                                                      Ю
                                                                                                                  similarity)
                                                                                                                           (By similarity)
Inhibitory (P1)
                                                                                                                                                                                                                                                                              Chromophore Chromophore
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                                                                                                                                                                                                                                                                                                               BPTI/Kunitz
Chromophore
                                                                                                                                                                                                                                                                                                                                      BPTI/Kunitz inhibitor
                                                                                                                                                                                                                                                                                                                                                                       By similarity.
Alpha-1-microglobulin.
                                                                                                                                                                                                                                                                                                                                                             Inter-alpha-trypsin
                                                                                          -> S (in Ref. 2).
CE4D9FC7375DA80B
                                                                                                                                                                                                                                                                                                                                                                                                          Repeat; Serine
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                                           7.2e-23;
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JNK cascade; ISS
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                                                                                                                             (trypsin) (By
                                                                                            CRC64;
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                                                                                                                                                                                                                                                                                                                                                              inhibitor
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(Potential).
(Potential).
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                                              Gaps
                        56
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RC STRAIN=FVB/N: TISSUE-Salivary gland;

XX MEDIJINE=22388257; PubMed=12477332; DOI=10.1073/pnas.242603899;

XX Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

XX Altasner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

XX Altasner R.D., Collins F.S., Wagner L., Shenmen C.F., Bhat N.K.,

XX Altasner R.D., Collins F.S., Wagner L., Schaefer C.F., Bhat N.K.,

XX Altasner R.D., Collins F.S., Wagner L., Schaefer C.F., Bhat N.K.,

XX Altasner R.D., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

XX Altasner R.F., Jordan H., Moore T., Max S.I., Wang J., Hong L.,

XX Altasner R.F., Jordan H., Moore T., Max S.I., Wang J., Hong L.,

XX Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

XX Stapleton M.J., Usdin T.B., Toshiyuki S., Carrinci P., Prange C.,

XX Brownstein M.J., Usdin T.B., Toshiyuki S., Carrinci P., Prange C.,

XX Brownstein M.J., McBun T.B., Toshiyuki S., Carrinci P., Prange C.,

XX Brownstein M.J., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

XX Allalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

XX Allalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

XX Allalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

XX Allalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

XX Allalon D.K., Muzny M.M., Green E.D., Dickson M.C.,

XX Allalon D.K., Tolkinan J.W., Green E.D., Dickson M.C.,

XX Allalon D.K., Shalska U., Smailus D.E., Schnerch A., Schein J.E.,

XX Allalon D.K., Stalska U., Smailus D.E., Schnerch A., Schein J.E.,

XX Allalon D.K., Shalska U., Smailus D.E., Schnerch A., Schein J.E.,
   SEQUENCE FROM STRAIN=FVB/N; Strausberg R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q925W1;
                                                                                                                                                                                                                                                                                                                                            Submitted (JAN-2002)
                                                                                                                                                                                                                                                                                                                                                                                                                            "Generation and initial analysis of and mouse cDNA sequences."; Proc. Natl. Acad. Sci. U.S.A. 99:16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           evolution."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=99326507; PubMed=10395906; DOI=10.1016/S0378-1119(99)00191-2; Lindqvist A., Rouet P., Salier J.P., Akerstrom B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Name=Ambp; Synonyms=AMBP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                microglobulin/bikunin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-DEC-2001 (TYEMBLYE1 19, Created)
01-DEC-2001 (TYEMBLYE1 19, Last sequence update)
25-OCT-2004 (TYEMBLYE1 28, Last annotation update)
Alpha-1-microglobulin/bikunin precursor (BM6H1.2.1)
                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "The alpha1-microglobulin/bikunin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jones S.J., Marra M.A.;
                                                                                                                                                                                                                                                                                                                                                                                                               Ξ
AGD; MGI:88002; Ambp.
30; GO:0005615; C:extracellular space; TAS.
30; GO:0005886; C:plasma membrane; ISS.
30; GO:001985; F:calcium channel inhibitor activity; I:30; GO:001985; F:calcium oxalate binding; ISS.
30; GO:0020037; F:heme binding; ISS.
30; GO:0020037; F:leme binding; ISS.
30; GO:004862; F:IGA binding; ISS.
30; GO:0048803; F:plasmin inhibitor activity; ISS.
30; GO:0030304; F:trypsin inhibitor activity; ISS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          234:329-336(1999).
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TISSUE=Salivary
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Rodentia;
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Sciurognathi;
                                                                                                                                                                                                                                                                                                                                                                          gland;
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hi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               than 15,000
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                                                                                                      activity;
                                                                                                                                                                                                                                                                        databases.
                                                                                                                                                                                                                                                                                                                                            databases.
                                                                                                                                                                                                                                        domains
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; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                             full-length human
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PARCULT POBLUT P
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Best Local S
Matches 43
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SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
STRAIN-C57BL/6J; TISSUE=Liver;
MEDLINE=99279253; PubMed=10349636;
Carninci P., Hayashizaki Y.;
"High-efficiency full-length cDNA CMeth. Enzymol. 303:19-44(1999).
SEQUENCE FROM N.A.
STRAIN=C57BL/6J; TISSUE=Liver;
MEDLINE=20499374; PubMed=11042159; D
Carninci P., Shibata Y., Hayatsu N.,
Konno H., Okazaki Y., Muramatsu M.,
                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
STRAIN=C57BL/6J; TISSUB=Liver;
The FANTOM Consortium,
the RIKEN Genome Exploration Research
"Analysis of the mouse transcriptome b
60,770 full-length cDNAs.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
STRAIN=C57BL/60; TISSUE=Liver;
MEDLINE=21085660; PubMed=11217851; DOI=10.1038/35055500;
RIKEN FANTOM Consortium;
"Functional annotation of a full-length mouse cDNA colle
Nature 409:685-690(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lipocalin;
SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRINTS; PR00179; LIPOCALIN.
ProDom; PD000222; Prot_Inh_Kunz-m;
SMART; SM00131; KU; 2.
                                                                                                                                                                                                             60,770 full-length cDNAs.";
Nature 420:563-573(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=10090;
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GO:0042167; P:heme catabolism; ISS.
GO:0050777; P:negative regulation of immur GO:0046329; P:negative regulation of JNK c GO:0007565; P:pregnancy; ISS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         285
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43; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACNIPIVOGPCRAFIKIWAFDAAOGKCIQFHYGGCKGNGNKFYSEKECKEYCGVP
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alpha-1-microglobulin/bikunin.
; CFB9208D37DF0021 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cloning.";
                                      DOI=10.1101/gr.145100; ., Sugahara Y., Shibata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DOI=10.1016/S0076-6879(99)03004-9;
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                                                                                                                                                                                                                                                                                h Group Phase I & II
based on functional
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.2e-23;
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JNK cascade; ISS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cDNA collection
          Y., Shibata
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                                                                                                                                                                                                                                                                                annotation
                                                                                                                                                                                                                                                                                                            Team;
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RC STRAINGSUBLELIVEY;
RA Adachi J., Aisawa K., Akahira S., Akimura T., Arai A., Aono H.,
RA Arakwa T., Bono H., Carninci P., Fukuda S., Fukunishi Y., Furuno M.,
RA Arakwa T., Hara A., Hayatsu N., Hiramoto K., Hiraoka T., Hori F.,
Imotani K., Ishii Y., Itch M., Izawa M., Kasukawa T., Kato H.,
RA Kawai J., Kojima Y., Konno H., Kouda M., Kaya S., Kurihara C.,
RA Matsuyama T., Miyazaki A., Nishi K., Nomura K., Numazaki R., Ohno M.,
RA Okazaki Y., Okido T., Owa C., Saito H., Saito R., Sakai C., Sakai K.,
RA Sano H., Sasaki D., Shibata K., Shibata Y., Shiraki T.,
RA Sogabe Y., Suzuki H., Tagami M., Tagawa A., Takahashi F., Tanaka T.,
RA Tejima Y., Toya T., Yamanura T., Yasunishi A., Yoshida K., Yoshino M.,
RA Muramatsu M., Hayashizaki Y., Yasunishi A., Yoshida K., Yoshino M.,
RA Muramatsu M., Hayashizaki Y., Yasunishi A., Yoshida K., Yoshino M.,
RA Muramatsu M., Hayashizaki Y., Yasunishi A., Yoshida K., Yoshino M.,
RA Muramatsu M., Hayashizaki Y., Yasunishi A., Yoshida K., Yoshino M.,
RA Muramatsu M., Hayashizaki Y., Yasunishi A., Yoshida K., Yoshino M.,
RA Muramatsu M., Hayashizaki Y., Yasunishi A., Yoshida K., Yoshino M.,
RA Muramatsu M., Hayashizaki Y., Yasunishi A., Yoshida K., Yoshino M.,
RA Muramatsu M., Hayashizaki Y., Yasunishi A., Yoshida K., Yoshino M.,
RA Muramatsu M., Hayashizaki Y., Yasunishi A., Yoshida K., Yoshino M.,
RA Muramatsu M., Hayashizaki Y., Yasunishi A., Yoshida K., Yoshino M.,
RA Muramatsu M., Hayashizaki Y., Yasunishi A., Yoshida K., Yoshida K.,
RA Goldoloo (0000) T., Endonim T.,
RA Muramatsu M., Hayashizaki Y., Yasunishi A., Yoshida K.,
RA G., GO:0003034; Fitpotein moxalate binding; ISS.
DR GO; GO:0042160; Fitpotein homodimerization activity; ISS.
DR GO; GO:0042167; P:heme binding; ISS.
DR GO; GO:0042167; P:heme catabolism; ISS.
DR GO; 
    Query Match
Best Local S
Matches 43
                                                                                                                                                                                                                       InterPro; IPR002968; Al-microglobln.
InterPro; IPR01038; Calycin.
InterPro; IPR010345; Lipocalin.
InterPro; IPR002345; Lipocalin.
InterPro; IPR00256; Lipocalin.
InterPro; IPR00253; Prot Inh Kunz-m.
Pfam; PF00014; Kunitz BPTI; 2.
Pfam; PF00015; Lipocalin; 1.
PFINTS; PR01215; AlmCGLOBULIN.
PRINTS; PR00759; BASICPTASE.
PRINTS; PR00759; LIPCCALIN.
PRODOM; PD000222; Prot_Inh_Kunz-m; 2.
SMART; SM00131; KU; 2.
PROSITE; PS00280; BPTI_KUNITZ_1; 2.
PROSITE; PS00280; BPTI_KUNITZ_2; 2.
PROSITE; PS00213; LIPOCALIN; UNKNOWN_1.
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                                                                                                                                                              Lipocalin.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes."; Genome Res. 10:1617-1630(2000).
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STRAIN=C57BL/6J; 7
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    79.3%;
nilarity 78.2%;
Conservative
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                                                                                                                                                                  39101 MW;
    Score 261; DB Pred. No. 9.2e 5; Mismatches
                                                                                                                                                              E593222FBC01BC3D CRC64;
7;
                                                                                 DB 2;
                                                                                 Length 349;
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EMBL; D31813; BAA06600.1; -.
HSSP; P02760; IBIK.
GO; GO:0005576; C:extracellula
GO; GO:0005886; C:plasma membra
GO; GO:001886; F:calcium chan
GO; GO:0046904; F:calcium oxal
GO; GO:0020037; F:heme binding;
GO; GO:0020037; F:protein homo
GO; GO:0042803; F:protein homo
GO; GO:0030304; F:trypsin inhi
GO; GO:0030336; P:anti-inflamm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AMBP MERUN STANDARD; PRT; 346 AA. 062577; Q62556; 01-NOV-1997 (Rel. 35, Created) 01-NOV-1997 (Rel. 35, Last sequence update) 05-JUL-2004 (Rel. 44, Last annotation update) 05-JUL-2004 (Rel. 44, Last annotation update) AMBP protein precursor (Contains: Alpha-1-microglobulin; I trypsin inhibitor light chain (ITI-LC) (Bikunin) (HI-30)]. Name=AMBP; Synonyms=ITIL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MERUN
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Gerbi
                                                                                                                                                                                                                                                  or send an
                                                                                                                                                                                                                                                              This SWISS-PROT entry is copyright. It is produced through a collab between the Swiss Institute of Bioinformatics and the EMBL outst the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for comentities requires a license agreement (See http://www.isb-sib.ch/an or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            other species.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ide H., Itoh H., Nawa Y.;
"Sequencing of cDNNAs encoding alpha 1-microglobulin/bikunin of Mongolian gerbil and Syrian golden hamster in comparison with
GO; GO:0005576; C:extracellular; ISS.
GO; GO:0005886; C:plasma membrane; ISS.
GO; GO:0005886; C:plasma membrane; ISS.
GO; GO:00046904; F:calcium channel inhibitor acti
GO; GO:0020037; F:heme binding; ISS.
GO; GO:0020037; F:heme binding; ISS.
30; GO:0019862; F:IGA binding; ISS.
30; GO:0019862; F:IgA binding; ISS.
30; GO:0042803; F:protein homodimerization activity; IS; GO:0030304; F:trypsin inhibitor activity; IS; GO:00303036; P:anti-inflammatory response; IS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=10047;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Meriones.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ide H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=95110820;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE=Liver;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      appears not only as a free monomer but also in complexes with I and albumin (By similarity).

FUNCTION: Inter-alpha-trypsin inhibitor, present in plasma and urine, inhibits trypsin, plasmin, and lysosomal granulocytic elastase (By similarity).

SUBUNIT: I-alpha-I plasma protease inhibitors are assembled fro one or two heavy chains (HI, H2 or H3) and one light chain, bikunin. Inter-alpha-inhibitor (I-alpha-I) is composed of H1, H and bikunin, inter-alpha-like inhibitor (I-alpha-LI) of H2 and bikunin, and pre-alpha-inhibitor (P-alpha-I) of H3 and bikunin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            similarity).

SUBCELLULAR LOCATION: Secreted.

TISSUE SPECIFICITY: Expressed by the liver and secreted in plasma.

PTM: The precursor is proteolytically processed into two

separately functioning proteins.

separately functioning proteins.

PTM: Alpha-1-microglobulin contains covalently linked brown-yellow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 chim. Blophys. Acta 1209:286-292(1999).
FUNCTION: Alpha-1-microglobulin occurs in many physiological FUNCTION: Department and cerebrospinal fluid. It fluids including plasma, urine, and cerebrospinal fluid. It
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 chromophores (By similarity) SIMILARITY: In the N-termina
                                                                                                                                                                                                                                                                                                                                                                                                                              SIMILARITY: Contains 2 BPTI/Kunitz inhibitor domains.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              285
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACNLPIVRGPCIAPFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PubMed=7529051; DOI=10.1016/0167-4838(94)90198-8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N-terminal section;
                                                 activity;
                                                                                                                              : activity; ISS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     belongs to
          SSI
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; Gerbillinae;
                                                 ISS.
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                                                                                                                                                                                                                                                                                                                                                                  EMBL outstation
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                                                                                                                                                                                                                                                                                                                                                                      a collaboration -
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RESULT 10
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Best Local S
Matches 42
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GO; GO:00042167; P:heme catabolism; ISS.
GO; GO:0050777; P:negative regulation of im
GO; GO:0046329; P:negative regulation of JN
GO; GO:0007565; P:pregnancy; ISS.
InterPro; IPR002968; Al-microglobin.
InterPro; IPR002968; Al-microglobin.
InterPro; IPR002345; Lipocalin.
InterPro; IPR002345; Lipocalin.
InterPro; IPR002566; Lipocalin.
InterPro; IPR002231; Prot_Inh_Kunz-m.
Pfam; PF00014; Kunitz BPT; 2.
Pfam; PF00014; Lipocalin; 1.
PRINTS; PR00179; BASICPTASE.
PRINTS; PR00179; LIPOCALIN.
ProDom; PD000222; Prot_Inh_Kunz-m; 2.
SMART; SM00131; KU; 2.
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                                                                                 Q64240; P19603; Q63336; 01-FEB-1991 (Rel. 17, Created) 01-FEB-1991 (Rel. 17, Created) 01-MOV-1997 (Rel. 37, Last sequence update) 05-JUL-2004 (Rel. 44, Last annotation update) 05-JUL-2004 (Rel. 44, Last annotation update) AMBP protein precursor [Contains: Alpha-1-microglobulin; Inter-alpha-1MBP protein precursor [Contains: Alpha-1-microglobulin; Trypstatin]
                                                                                                                                                                                                                                                                                                                                                                                                                                Signal
SIGNAL
CHAIN
CHAIN
       SEQUENCE FROM N.A. TISSUE=Liver; MEDLINE=92182014;
                                                                                                                                                                                                                                                                   SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE; PS00280; BPTI KUNITZ 1; PROSITE; PS50279; BPTI KUNITZ 2; Glycoprotein; Lipocalin; Plasma;
                                                 Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                      AMBP RAT
                                                                                                                                                                                                                                                  SEQUENCE
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                                                                          Name=Ambp; Synonyms=Itil;
                                                                  Rattus norvegicus (Rat)
                                                                                                                                                                                                                42;
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                                                                                                                                                                              ACNIPIVQGPCRAYIKIMAFDAAQGKCIQFTYGGCKGNGNKFYSEKECKEYCGVP
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Α.,
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Bratt
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PubMed=1371936; D
tt T., Altieri M.,
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Chromophore (By similari
Chromophore (By similari
Chromophore (By similari
By similarity.
N-linked (GlcNac. . . ) (
N-linked (GlcNac. . . ) (
N-linked (GlcNac. . . ) (
Inhibitory (P1) (chymotr
(By similarity).
                                                                                                                                                                                                              Score 259; DB
Pred. No. 1.6e
6; Mismatches
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Chromophore
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Alpha-1-microglobulin.
                                                Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Rat
                                                                                                                                                                                                                                                                                                                                                                                                                                Inter-alpha-trypsin
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2.
Repeat;
DOI=10.1016/0167-4781(92)90462-9;
., Kastern W., Aakerstroem B.;
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No. 1.
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1.6e-22;
7;
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z inhibitor 1.
z inhibitor 2.
z inhibitor 2.
e (By similarity).
e (By similarity).
e (By similarity).
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                                                  Murinae; Rattus
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EMBL; S87544; AAB21782.1; -.
EMBL; J02600; AAA41596.1; -.
PIR; S21089; S21089.
HSSP; P02760; LBIK.
RGD; 2102; Ambp.
GG; GG:0005876; C:extracellular; ISS.
GG; GG:0005886; C:plasma membrane; ISS.
GO; GG:0019855; F:calcium channel inhibitor aci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Biochim. [2]
                                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through a collable between the Swiss Institute of Bioinformatics and the EMBL outst the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for contentities requires a license agreement (See http://www.isb-sib.ch/ar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Rat alpha 1-microglobulin: co-expression chain of inter-alpha-trypsin inhibitor."; Biochim. Biophys. Acta 1130:63-67(1992).
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Kido H., Yokogoshi Y., Katunuma N.;
"Kunitz-type protease inhibitor found :
properties, and amino acid sequence.";
J. Biol. Chem. 263:18104-18107(1988).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kastern W., Bjoerck L., Aakerstroem
"Developmental and tissue-specific "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE OF 141-195 FROM N.A. MEDLINE=87033744; PubMed=2429963;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE OF 283-343,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . Biol.
                                                                                                                                                                                                                                                                                                                                                                                                                                               plasma. Trypstatin is present in mast cell granules.

PTM: The precursor is proteolytically processed into t

separately functioning proteins.

PTM: Alpha-1-microglobulin contains covalently linked chromophores (By similarity).

PTM: Heavy chains are interlinked with bikunin via a c

4-sulfate bridge to the their C-terminal aspartate (By
                                                                                                                                                                                                                                                                                                                                                                     SIMILARITY: Contains 2 BPTI/Kunitz inhibitor domains.
                                                                                                                                                                                                                                                                                                                                                                                                         SIMILARITY: In the N-terminal section; belongs to the lipocalin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  in the rat.
                                                                                                                                                                                                     s requires a license agreement (See http://www.isb-sib.an email to license@isb-sib.ch).
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RESULT 11
IATR CAPHI
ID TATR CAPHI STANDARD; PRT; 123 AA
AC P62756; P13371;
DT 01-JAN-1990 (Rel. 13, Created)
DT 01-JAN-1990 (Rel. 13, Last sequence update)
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                                                                                                                                                    Query Match
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Matches 43
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R GO; GO:0019862; F:IgA binding; ISS.
R GO; GO:0030568; F:plasmin inhibitor activity; ISS.
R GO; GO:0042803; F:protein homodimerization activity; ISS.
R GO; GO:0042803; F:protein inhibitor activity; ISS.
R GO; GO:0030304; F:trypsin inhibitor activity; ISS.
R GO; GO:0003155; P:cell almestory response; ISS.
R GO; GO:0007155; P:cell adhesion; ISS.
R GO; GO:00461277; P:heme catabolism; ISS.
R GO; GO:0046129; P:negative regulation of JNK cascade; ISR
GO; GO:0046129; P:negative regulation of JNK cascade; ISR
GO; GO:0046529; P:pregnancy; ISS.
R InterPro; IFR00139; Al-microglobin.
R InterPro; IFR001396; Al-microglobin.
R InterPro; IFR001345; Lipocalin.
R InterPro; IFR0002345; Lipocalin.
R InterPro; IFR0002345; Lipocalin.
R InterPro; IFR0002345; Lipocalin.
R Pfam; PF00014; Kunitz BPT1; 2.
R Pfam; PF00061; Lipocalin; 1.
R Pfam; PF00061; Lipocalin; 1.
R Pfam; PF00061; Lipocalin; 1.
R Pfam; PF000622; Prot_Inh_Kunz-m; 2.
R PRINTS; PR00179; LIPOCALIN.
R PRODOm; PD000222; Prot_Inh_Kunz-m; 2.
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PROSITE; PS50279; BPTI_KUNITZ_2; 2.
PROSITE; PS00213; LIPOCALIN; 1.
Direct protein sequencing; Glycoprotein; Lipocalin;
Serine protease inhibitor; Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIGNAL
                                                                                                    285
                                                                                                                             N
                                                                                                                                                     43;
                                                                                                                                                               Similarity
                                                                                                   142
302
323
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ilarity 78.2%;
Conservative
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302 W
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38851 MW;
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349
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(By similarity).

Inhibitory (P1) (trypsin) (By similarity).

G -> A (in Ref. 2).

G -> A (in Ref. 3).

G -> N (in Ref. 3).

KE -> PK (in Ref. 3).

E -> W (in Ref. 3).
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By similarit
                                                                                                                                                  Score 258; DB Pred. No. 2.1e 5; Mismatches
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BPTI/Kunitz
BPTI/Kunitz
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Alpha-1-microglobulin.
Alpha-1-microglobulin.
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By similarity.
By similarity.
N-linked (GlcNAc...) (Potential).
N-linked (GlcNAc...) (Potential).
Inhibitory (P1) (chymotrypsin, elastase)
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-> W (in Ref. 3).
1B7FB7DCB0824E01 CRC64;
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. No. 2.1e-22;
ismatches 7;
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z inhibitor 2.
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JNK cascade; ISS
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"Primary structure of a proteinase inhibitor released from goat sami inter-alpha-trypsin inhibitor.";
Biochim. Biophys. Arts on T.
                                                                                  SHEEP STANDARD; PRT; 123 AA.
P62757; P13371;
01-JAN-1990 (Rel. 13, Created)
01-JAN-1990 (Rel. 13, Last sequence update)
25-OCT-2004 (Rel. 45, Last annotation update)
Inter-alpha-trypsin inhibitor (ITI) (Inhibitory (Fragment).
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-i- SIMILARITY: Contains 2 BPTI/Kunitz inhibitor domains.

HSSP; P02760; 1BIK.

InterPro; IPR002223; Prot_Inh_Kunz-m.
Pfam; PF00014; Kunitz BPTI; 2.
PFINITS; PR00759; BASICPTASE.

SMART; SM00131; KU; 2.
PROSITE; PS00280; BPTI_KUNITZ_1; 2.
PROSITE; PS00280; BPTI_KUNITZ_2; 2.
Direct protein sequencing; Glycoprotein; Plasma; Repeat;
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Capra hircus (Goat).
Capra hircus (Goat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pec
Caprinae; Capra,
NCBI_TaxID=9925;
              Ovis aries (Sheep).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyia; Ruminantia; Pecora; Bovidae;
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Shim. Biophys. Acta 99:335-337(1989).

This inhibitory fragment, released from native ITI after PUNCTION: This inhibitory fragment, contains two homologous domains limited proteolysis with trypsin, contains two homologous domains the second domain is a strong inhibitor of trypsin, the Whoreas the second domain is a strong inhibitor of trypsin, the whoreas the second domain is a strong inhibitor of trypsin, the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     first domain interacts weakly with PN not at all with pancreatic elastase. SUBCELLULAR LOCATION: Secreted. MISCELLANEOUS: The amino acid at posi-
                                                                                                                                                                                                                                                                                                                                                 59
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43; Conserv
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                                                                                                                                                                                                                                                                                                                                               Eutheria;
Ovis.
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76.8%;
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BPTI/Kunitz inhibitor 2
BPTI/Kunitz inhibitor 2
Reactive bond for chymo
elastase.
Reactive bond for tryps
By similarity.
                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 257; DB Pred. No. 1.1e 5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      295038173F22D2D1 CRC64;
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AMBP MESAU STANUALL,

ID AMBP MESAU STANUALL,

AC Q60559; Q60558; Q9QW86; Q9QW87;

AC Q60559; Q60558; Q9QW86; Q9QW87;

DT 01-NOV-1997 (Rel. 35, Last sequence update)

DT 05-UTL-2004 (Rel. 44, Last annotation update)

DE AMBP protein precursor (Contains; Alpha-1-microglobulin; Inter-alpha-trypsin inhibitor light chain (ITI-LC) (Bikunin) (HI-30); Trypstatin).

"MRP: Synonyms=ITIL;

"MRP: Synonyms=ITIL;

"MRP: Synonyms=ITIL;

"ATTING (Golden hamster).

"Craniata; Vertebrata; Euteleostomi;
          RRY ON OUT OF THE REAL OF THE 
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Pfam; PF00014; Kunitz_BPTT; 2.
PRINTS; PR00759; BASICPTASE.
SMART; SM00131; KU; 2.
PROSITE; PS00280; BPTI KUNITZ 1; 2.
PROSITE; PS00280; BPTI KUNITZ 2; 2.
Direct protein sequencing; Glycoprotein; Plasma; Repeat; Serine protease inhibitor.
NON TER 1 5 5 BPTI/Kunitz inhibitor 1.
DOMĀIN 5 55 BPTI/Kunitz inhibitor 1.
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SITE
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"The amino-acid sequence of the trypsin-released inhibitor from sheep
inter-alpha-trypsin inhibitor.",
Biol. Chem. Hoppe-Seyler 368:727-731(1987).
-!- FUNCTION: This inhibitory fragment, released from native ITI after
limited proteolysis with trypsin, contains two homologous domains.
Whereas the second domain is a strong inhibitor of trypsin, the
first domain interacts weakly with PMN-granulocytic elastase and
not at all with pancreatic elastase.
TISSUE=Liver;
MEDLINE=95110820; PubMed=7529051;
Ide H., Itoh H., Nawa Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HSSP; P02760; 1BIK.
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MEDLINE=87299012; PubMed=2441725;
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                                                        SEQUENCE
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                                                          FROM N.A.
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BPTI/Kunitz inhibitor 2.
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                          DOI=10.1016/0167-4838(94)90198-8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   257; DB 1;
No. 1.1e-22;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUBCELLULAR LOCATION: Secreted.
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SUBUNIT: I-a
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J. Biochem. 120:145-152(1996)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE OF 205-348,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Sequencing of cDNAs encoding alpha 1-microglobulin/bikunin
Mongolian gerbil and Syrian golden hamster in comparison wit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Inter-alpha-trypsin inhibitor and
                                                                                                                                                                        fluids including plasma, urine, and cerebrospinal fluid appears not only as a free monomer but also in complexe and albumin (By similarity).

FUNCTION: Inter-alpha-trypsin inhibitor, present in pla urine, inhibits trypsin, plasmin, and lysosomal granulo elastase (By similarity).

FUNCTION: Trypstatin is a trypsin inhibitor. It inhibit coagulation factor Xa and tryptase about 100-fold more than porcine pancreatic trypsin and chymase. It is a mo is also found in mast cells as a complex with tryptase
SUBUNIT: I-alpha-I plasma protease inhibitors are assembled from one or two heavy chains (H1, H2 or H3) and one light chain, bikunin. Inter-alpha-inhibitor (I-alpha-I) is composed of H1, H2 and bikunin, inter-alpha-like inhibitor (I-alpha-LI) of H2 and bikunin, and pre-alpha-inhibitor (P-alpha-I) of H3 and bikunin (H2)
                                                                                                                                                                                                                                                                                                                                                                                                        FUNCTION: Alpha-1-microglobulin occurs in many physiological fluids including plasma, urine, and cerebrospinal fluid. It appears not only as a free monomer but also in complexes wit
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           I) of H2 and
and bikunin (By
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entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch). This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial PTM: Alpha-1-microglobulin contains a covalently linked brown-yellow chromophore (By similarity).
PTM: Heavy chains are interlinked with bikunin via a chondroit 4-sulfate bridge to the their C-terminal aspartate (By SIMILARITY: Contains 2 BPTI/Kunitz inhibitor domains. SIMILARITY: In the N-terminal section; belongs ç the a chondroitin lipocalin

liver and s

into

separately

secreted in plasma

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EMBL; D31814; BAA06601.1; -.

R HSSP; P02760; 1BIK.

R GO: GO:0005576; C:Rxtracellular; ISS.
GO: GO:0005576; C:Rxtracellular; ISS.
GO: GO:0005886; C:plasma membrane; ISS.
R GO; GO:0019855; F:calcium channel inhibitor active control of the control
                                                                          IPR002345;
IPR000566;
Lipocalin.
Lipocln_cytFABP.
Prot_Inh_Kunz-m.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             immune response;
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Matches 42
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Pfam; PF00061; Lipocalin; 1.
PRINTS; PR00759; BASICPTASE.
PRINTS; PR00179; LIPOCALIN.
ProDom; PD000222; Prot_Inh_Kunz-m; 2
PROSITE; PS00280; BPTI_KUNITZ_1; 2.
PROSITE; PS00280; BPTI_KUNITZ_2; 2.
PROSITE; PS00213; LIPOCALIN; 1.
PROSITE; PS00213; LIPOCALIN; 1.
Yoshida K., Suzuki Y., Yamamoto K., Sinohara H.;
"Guinea pig alphal-microglobulin/bikunin: cDNA sequencing, tis
expression and expression during acute phase.";
Comp. Blochem. Physiol. B, Comp. Blochem. 122:165-172(1999).
-!-SIMILARITY: Contains 2 BPTI/Kunitz inhibitor domains.
EMBL; AB006444; BAA25305.1; -.
HSSP; P02760; IBIK.
GO; GO:0005886; C:plasma membrane; ISS.
GO; GO:0019855; F:calcium channel inhibitor activity; ISS.
GO; GO:00146904; F:calcium oxalate binding; ISS.
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070160;
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                             01-AUG-1998 (TrEMBLrel. 07, Created)
01-AUG-1998 (TrEMBLrel. 07, Last sequence update)
01-AUR-2004 (TrEMBLrel. 26, Last annotation updat
Alpha-1-microglobulin/bikunin.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Direct protein sequencing; Glycoprotein; Lipocalin; Serine protease inhibitor; Signal.
SIGNAL 1 19 By similarity.
CHAIN 20 202 Alpha-1-microglobulin.
                                                                                                                                SEQUENCE FROM N.A. STRAIN=Hartley; TI
                                                                                                                                                               NCBI_TaxID=10141;
                                                                                                                                                                            Eukaryota; Metazoa;
Mammalia; Eutheria;
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                                                                                                                                                                                                                                                                                                                                                                                                                         38782 MW;
                                                                                                                                                                                                                                                                                                                                                                                    77.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chromophore (By similarity).
Chromophore (By similarity).
By similarity.
Inhibitory (P1) (chymotrypsin, elastas (By similarity).
Inhibitory (P1) (trypsin) (By Inhibitory (P1) (trypsin)
                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Trypstatin.
BPTI/Kunitz
BPTI/Kunitz
Chromophore
Chromophore
                                                                                                                                                                                                                                                                                                                                                                                     Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                    similarity).
G -> E (in Ref.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Inter-alpha-trypsin
                                                                                                                                                                             Craniata; Vertebrata; Euteleostomi;
Hystricognathi; Caviidae; Cavia.
                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                          core 254; DB red. No. 6.2e Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                         8C954584B7DBE728 CRC64;
                                                                                                                                                                                                                                                                        352
                                                                                                                                                                                                                                                                                                                                                                         DB 1; I
5.2e-22;
hes 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (By similarity).
(By similarity).
(By similarity).
(By similarity).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             inhibitor inhibitor
                                                                                                                                                                                                                                                                        A
                                                                                                                                                                                                                         update)
                                                                                                                                                                                                                                                                                                                                                                                                                                    2).
                                                                                                         sequencing, tissue
                                                                                                                                                                                                                                                                                                                                                                                                 Length 349;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          inhibitor
                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Plasma; Repeat;
                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 elastase)
                                                                                                                                                                                                                                                                                                                                                                           Gaps
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RESULT
Q6P2V8
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RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Richards S., Mocley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Mozny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahley J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA Hiktesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Karywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA Arnes S. T. Marra M. A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q6P2V8
Q6P2V8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pfam; PF00014; Kunitz BPTI; 2.
Pfam; PF00061; Lipocalin; 1.
PRINTS; PR01215; AIMCGLOBULIN.
PRINTS; PR01759; BASICPTASE.
PRINTS; PR00179; LIPOCALIN.
ProDom; PD000222; Prot_Inh_Kunz-m; 2
SMART; SM00131; KU; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Xenopus tropicalis (Western clawed frog) (Silurana tropicalis).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR002345; Lipocalin.
InterPro; IPR000566; Lipocln_cytFABP.
InterPro; IPR002223; Prot_Inh_Kunz-m.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE=Embryo;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=8364;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               InterPro; IPR002968; Al-microglobln.
InterPro; IPR011038; Calycin.
                                                      Jones S.J., Marra M.A.;
                              "Generation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               50; GO:0020037; F:heme binding; ISS.
50; GO:0019862; F:IgA binding; ISS.
50; GO:0019862; F:plasmin inhibitor activity; IS
50; GO:0042803; F:protein homodimerization activity; IS
50; GO:0030304; F:trypsin inhibitor activity; IS
50; GO:0030304; F:trypsin inhibitor activity; IS
50; GO:0030236; P:anti-inflammatory response; IS
50; GO:0030236; P:heme catabolism; ISS.
50; GO:0042167; P:heme catabolism; ISS.
50; GO:0050777; P:negative regulation of immune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GO:0050777; P:negative regulation of GO:0046329; P:negative regulation of GO:0007565; P:pregnancy; ISS.
mouse cDNA sequences.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PS00280; BPTI_KUNITZ_1; 2.
PS50279; BPTI_KUNITZ_2; 2.
352 AA; 39033 MW; BAA7447B574C2FAB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACNLPIVPGPCQGSAQLWAFDAIKGKCVRFTYGGCQGNGNKFYSEKECKEYCGAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  76.9%;
nilarity 78.2%;
Conservative
                           and initial analysis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Xenopus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Last
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Last
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 253; DB 2;
Pred. No. 8.3e-22
2; Mismatches 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sequence up
                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2
                              more
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                              than
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JNK cascade; ISS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    activity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SSI
                              15,000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ISS
                           full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ISS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           56
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RESULT 16
P70004
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Best Local S
Matches 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  InterPro; IPR002968; Al-microglobin.
InterPro; IPR001038; Calycin.
InterPro; IPR0010345; Lipocalin.
InterPro; IPR002345; Lipocalin.
InterPro; IPR002565; Lipocalin.
InterPro; IPR002565; Lipocalin.
InterPro; IPR00223; Prot Inh Kunz-m.
Pfam; PP00014; Kunitz BPTI; 2.
Pfam; PP00061; Lipocalin; 1.
PRINTS; PR00175; AIMCGLOBULIN.
PRINTS; PR00175; BASICPTASE.
PRINTS; PR00175; LIPOCALIN.
ProDom; PD000222; Prot_Inh_Kunz-m; 2.
SMART; SM00131; KU; 2.
PROSITE; PS00280; BPTI_KUNITZ_1; 2.
PROSITE; PS00213; LIPOCALIN; 1.
PROSITE; PS00213; LIPOCALIN; 1.
                                                                         EMBL; D87752; I
HSSP; P02760; 1
GO; GO:0004867;
GO; GO:0005215;
GO; GO:0006810;
                                                                                                                                                                                                                                                                                                                                                                                       P70004
P70004;
                                     InterPro;
InterPro;
InterPro;
                                                                                                                                                                        Dev.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Klein S., Gerhard D.S.;
Submitted (DEC-2003) to t.
-!- SIMILARITY: Belongs t.
-!- SIMILARITY: Contains
                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordat;
Amphibia; Batrachia; Anura;
                                                                                                                                                                                                                                                                                                                                  01-FEB-1997 (TrEMBLrel. 02, I
01-JUN-2003 (TrEMBLrel. 24, I
Alphal-microglobulin/bikunin
                                                                                                                                                                                                                                                                                                                                                                            01-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hypothetical SEQUENCE 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; BC064278; AAH64278.1; -. HSSP; P10646; IADZ.
                                                                                                                                                                                                 Kawahara A., Hikosaka A., Sasado T., "Thyroid hormone-dependent repression
                                                                                                                                                                                                                           TISSUE=Liver;
                                                                                                                                                                                                                                                                NCBI_TaxID=8355;
                                                                                                                                                                                                                                                                                                                      Xenopus laevis (African clawed
                         InterPro;
                                                                                                                                                                                                                                                                                Xenopodinae;
                                                                                                                                                                                      (AMBP)
            InterPro;
                                                                                                                                                                                                                                         EQUENCE FROM N.A.
                                                                                                                                         ahara A., Hikosaka A., Sasado T., Hirota K.;
yroid hormone-dependent repression of alphal-microglobulin/bikunin
BP) gene expression during amphibian metamorphosis.";
. Genes Evol. 206:355-362(1997).
SIMILARITY: Belongs to the lipocalin family.
SIMILARITY: Contains 2 BPTI/Kunitz inhibitor domains.
                                                                         GO:0004867; F:serine-type endopeptidase GO:0005215; F:transporter activity; IEA. GO:0006810; P:transport; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GO:0004867; F:serine-type endopeptidase GO:0005215; F:transporter activity; IEA. GO:0006810; P:transport; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Natl. Acad.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACNLPIVRGPCIAFFDRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACRIPITPGPCKAAKTHWAFDAAQGKCVTFAYGGCQGNGNQFYTEKECKEYCGV
                                    IPR002968; A1-microglobln.
IPR011038; Calycin.
IPR002345; Lipocalin.
IPR000566; Lipocln cytFABP.
IPR002223; Prot_Inh Kunz-m.
0014; Kunitz_BPTI; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ul protein;
342 AA; 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                         (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                                                                                                                                                                             Xenopus.
                                                                                                                   1BIK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SCi.
                                                                                                                                                                                                                                                                                          Chordata; Craniata; Vertebrata; Euteleostomi;; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              n; Lipocalin.
38191 MW; D9B95BE25C8C8B5A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       70.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₽.
                                                                                                                                                                                                                                                                                                                                                24,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            to the lipocalin family. 2 BPTI/Kunitz inhibitor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                Last sequence update)
Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 232; DB 2;
Pred. No. 2.5e-19;
4; Mismatches 11
                                                                                                                                                                                                                                                                                                                                  precursor
                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                      frog).
                                                                                                                                                                                                                                                                                                                                                                                                       342
                                                                                                                                                                                                                                                                                                                                    (AMBP).
                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                               update)
                                                                                                        inhibitor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     inhibitor activity; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 342;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                      activity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        333
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                                                                                                        IEA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
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Q7SZ46
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SQ FT
                                                                                                                                                                                                                                                                                        RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heiteh F.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heiteh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Wellin T.B., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Glbbs R.A.,
RA Wilting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Miting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Modriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Kones S. J. Mayra M.A.,
Green E.D., Dickson M.C.,
RA Rodriguez A.C., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
Jones S. J. Mayra M.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
Matches 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q7SZ46;
01-OCT-2003
01-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pfam; PF00061; Lipocalin; 1.
PRINTS; PR01215; ALMCGLOBULIN.
PRINTS; PR00759; BASICPTASE.
PRINTS; PR00179; LIPOCALIN.
ProDom; PD000222; Prot Inh Kunz-m;
SMART; SM00131; KU; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Xenopus laevis (African clawed frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-OCT-2003 (TrEMBLrel. 25,
01-OCT-2003 (TrEMBLrel. 25,
01-MAR-2004 (TrEMBLrel. 26,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00280; BPTI_KUNITZ_1; PROSITE; PS50279; BPTI_KUNITZ_2; PROSITE; PS00213; LIPOCALIN; 1.
                                                                                                                                                                                                                                                              Jones S.J., Marra M.A.; "Generation and initial analysis of more than 15,000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q7SZ46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lipocalin; Signal.
SIGNAL 1
            TISSUE=Whol
                               SEQUENCE FROM N.A
                                                                                                                      Richardson P.;
                                                                                                                                                        MEDLINE=22341132;
                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                            Proc. Natl. Acad.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE=Whole;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Xenopodinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ambp-prov protein.
                                                                                 "Genetic and initiative."
                                                                                                                                                                                                                                             mouse cDNA sequences."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      38;
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                                                                  225:384-391 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             342 AA;
                                                                                                                                     Strausberg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                  genomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Xenopus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18
                                                                                                                                   PubMed=12454917; DOI=10.1002/dvdy.10174;
                                                                                                                                                                                                                            Sci. U.S.A. 99:16899-16903(2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             342
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       69.3%;
                                                                                                      tools for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Last sequence update)
Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 228; DB 2;
Pred. No. 7.5e-19;
; Mismatches 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Potential.
; 3050508BFDC5C47B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Potential.
                                                                                                    Xenopus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            342
                                                                                                    research: The NIH Xenopus
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                                                                                                                                                                                                                                                                 full-length human
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                                                                                                                                                                                                                                                                                                                  Y.S.,
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Strausberg

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CC -|- SIMILARITY: Belongs to the EMBL/GenBank/DDBJ databases.

CC -|- SIMILARITY: Belongs to the lipocalin family.

CC -|- SIMILARITY: Contains 2 BPTI/Kunitz inhibitor domains.

DR EMBL; BC054142; AAH54142.1; -.

DR HSSP; P02760; 1BIK.

R GO; GO:0004867; F:serine-type emach
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P78492
                                                                                                                                                                          A PART OF REAL PROPERTY OF THE PROPERTY OF THE
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                                                                                    Query Match
Best Local S
Matches 38
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Best Local S
Matches 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GO; GO:0004867; F:serine-type endopeptidase inhibitor activity; IEA.
GO; GO:0005215; F:transporter activity; IEA.
GO; GO:0005215; F:transport; IEA.
InterPro; IPR011038; Calycin.
InterPro; IPR012345; Lipocalin.
InterPro; IPR002345; Lipocalin.
InterPro; IPR002345; Lipocalin.
InterPro; IPR002345; Lipocalin.
InterPro; IPR00223; Prot_Inh_Kunz-m.
Pfam; PP00014; Kunitz BPT; 2.
Pfam; PP00061; Lipocalin; 1.
ProDom; PD00022; Prot_Inh_Kunz-m; 2.
SWART; SW00111; KU; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                      P78492
P78492;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lipocalin.
SEQUENCE
                                                                                                                                                                                                                                                          EMBL; M11562; AAAS9194.1; -.
HSSP; P02760; 1BIK.
GO; GO:0004867; F:serine-type endopeptidase
InterPro; IPR002223; Prot Inh Kunz-m.
Pfam; PP00014; Kunitz BpTI; 1.
PRINTS; PR00759; BASICPTASE.
ProDom; PD000222; Prot Inh Kunz-m; 1.
SMART; SM00131; KU; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PS00280; BPTI_KUNITZ_1; PROSITE; PS50279; BPTI_KUNITZ_2; PROSITE; PS00213; LIPOCALIN; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Name=ITIL;
                                                                                                                                                                                                               PROSITE; PS00280; BPTI_KUNITZ_1; 1.
PROSITE; PS50279; BPTI_KUNITZ_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Inter-alpha-trypsin
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                                                                                                         Similarity
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                       WAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACRLPITPGPCKTAKTHWAFDAAQGKCVTFSYGGCQGNGNQFYTEKECKBYCGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACNIPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7 (TrEMBLrel. 03, Cre
7 (TrEMBLrel. 03, Lae
3 (TrEMBLrel. 24, Lae
3-trypsin inhibitor (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           342
                                                                                                                                                                            51
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                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                          AΑ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AA;
                                                                                                                                                                            5698 MW;
                                                                          69.0%; or
100.0%; Pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chordata;
Primates;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       69.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Last sequence update)
Last annotation update)
or (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 228; DB Pred. No. 7.5e.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Created)
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                                                                                    Score 227; DB; Pred. No. 1.8; 0; Mismatches
                                                                                                                                                                            C13D74054D45EED2 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BA18FA543B7D4481 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       228; DB 2;
No. 7.5e-19;
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                                                                                                      DB 2; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                 inhibitor
                                                                                      0
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                                                                                                                              Length
                                                                                      Indels
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                                                                                    Gaps
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                                                                                    0,
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RESULT 20
Q6ZNI4
ID Q6ZNI
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Q7SXH6
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RX Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RX Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RX Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RX Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RX Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RX Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RX Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hong L.,
RX Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hong L.,
RX Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RX Stapleton M., Joares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RX Stapleton M., Joares M.B., Bonaldo M.F., Casavant T.L., Prange C.,
RX Brownstein M.J., Ugdin T.B., Toshiyuki S., Carninci P., Prange C.,
RX Brownstein M.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RX Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RX Raha S.S., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RX Raha S.S., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RX Raha S.S., McChan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RX Raha S.S., McChan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RX Raha S.S., McChan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RX Raha S.S., McChan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RX Raha S.S., McChan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RX Raha S.S., McChan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RX Raha S.S., McChan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RX Rahama S., McChan P.J., McKernan K.J., Malek J.A., Sanchez A.,
RX Rahama S., McChan P.J., McKernan M., Madan A., Rodrigues S., Sanchez A.,
RX Rahama S., McChan P., Young A.C., Shevchenko Y., Bouffard G.G.,
RX Rahama S., McChan P., Young A.C., Shevchenko Y., Bouffard G.G.,
RX Rahama S., McChan P., M
                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted (NUG-2003) to the EMBL/GenBank/DDBJ databases.

-! SIMILARITY: Contains 2 BPTI/Kunitz inhibitor domains.

EMBL; BC055598; AAH55598.1; -.

HSSP; P02766; 1BIK.

ZPIN; ZDB-GENE-040426-1608; Zgc:66321.

ZPIN; ZDB-GENE-040426-1608; Zgc:66321.

GO; GO:0004867; F:serine-type endopeptidase inhibitor activity;

GO; GO:0005215; F:transporter activity; IEA.

GO; GO:0006810; P:transport; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          William M.A.;
Jones S.J., Marra M.A.;
Jones S.J., Marra M.A.;
"Generation and initial analysis of more than 15,000
and mouse cDNA sequences.";
NAtl. Acad. Sci. U.S.A. 99:16899-16903(2002).
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniforma
Cyprinidae; Danio.
NCBI TaxID=7955;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          u1-MAR-2004 (TrEMBLrel. 25, Last sequence update) similar to alpha-1-microglobulin/bikunin,. ORFNames=zgc:66321; Brachydanio raria '-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPR011038; Calycin.
InterPro; IPR002223; Prot Inh Kunz-m.
Pfam; PF00014; Kunitz BPT1; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SMART; SM00131; KU; 2. -
PROSITE; PS00280; BPTI KUNITZ_1; 1.
PROSITE; PS50779; BPTI KUNITZ_2; 2.
SEQUENCE 216 AA; 23835 MW; 9E951B4BF0245706 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProDom; PD000222; FI
SMART; SM00131; KU;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q7SXH6;
01-OCT-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
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                                                                                                                                                                                                  150
                                                                                                                                                                                                                                                                                                                                                         l Similarity
34; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PD000222; Prot_Inh_Kunz-m;
                                                                                                                                                                                                                                                       ACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCG
                                                                                                                                                                                                  ACRLPMDAGPCKAFVDLWAFDSSSGKCLSLKYGGCKGNGNRFYSKKECDEYCG
                                                                                                                                                                                                                                                                                                                                                         62.9%;
ilarity 64.2%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                     Score 207; DB 2;
Pred. No. 1.6e-16;
6; Mismatches 13;
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Q6ZNI4

PRELIMINARY;

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ORTHORNO
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Best Local S
Matches 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GO; GO:0004867; F:serine-type endopeptidase in Interpro; IPR001134; Netrin C. Interpro; IPR002223; Prot Interpro; IPR008223; Prot Interpro; IPR008223; TIMP_like. Interpro; IPR008993; TIMP_like. Pfam; PF00014; Kunitz BPTI; 2. PRINTS; PR00759; BASICPTASE. PRODm; PD000222; Prot Inh_Kunz-m; 2. SMART; SM00131; KU; 1. PROSITE; PS00280; BPTI_KUNITZ_1; 1. PROSITE; PS00280; BPTI_KUNITZ_2; 1. PROSITE; PS00280; BPTI_KUNITZ_2; 1. PROSITE; PS00189; NTR; 1.
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-!-SIMILRAITY: Contains 1 BPTI/Kunitz inhibitor domain.
EMBL, AK131196; BAD18391.1; -.
                                  Trexler M., Banyai L., Patthy L.;
"Distinct expression pattern of two related human multiple types of protease-inhibitory modules.";
Biol. Chem. 383:0-0(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Hypothetical protein FL/16032.
Homo sapiens (Human).
                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                   MEDLINE=21173622; PubMed=11274388; DOI=10.1073/pnas.061028398; Trexler M., Banyai L., Patthy L.; "A human protein containing multiple types of protease-inhibit
                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                modules."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 _TaxID=9606;
                                                                                                                                                                                                                                                       Nat1.
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                                                                                                                                                                                      FROM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 FROM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   283 AA;
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                                                                                                                                                                                      N.A.
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                                                                                                                                                                                                                                                       Sci.
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Primates;
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   2 BPTI/Kunitz inhibitor domains
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10;
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Pred. No. 1.8e
10; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                          98:3705-3709(2001)
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                                                                                                                                                                                                                                                                                                                               of protease-inhibitory
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                                                                                                      proteins
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             i T., Koua...
K., Kamihara K.,
T. Irie R.,
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                                                                                                              containing
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RESULT 22
Q6UXZ9
ID Q6UXZ
DR REIT RAA ARA RES COCCUR
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Best Local S
Matches 29
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Pfam; PF00014; Kunitz BFT1; 2.
Pfam; PF00095; WAP; 1.
PFAM; PR00003; 4DISULPHCORE.
PRINTS; PR00079; BASICPTASE.
PRODOM; PD000222; PTOT INh Kunz-
SMART; SM00408; IGc2; I.
SMART; SM00280; KAZAL; 1.
SMART; SM00211; KU; 2.
SMART; SM00211; KU; 2.
SMART; SM00217; WAP; 1.
                                                                                                                                                                                                                                              SEQUENCE FROM N.A.

SEARCH H.F., Gurney A.L., Abaya E., Baker K., Baldwin D., Brush J., Clark H.F., Gurney A.L., Abaya E., Baker K., Baldwin D., Brush J., Chen J., Chui C., Crowley C., Currell B., Deuel B., Dowd Eaton D., Foster J., Grimaldi C., Gu Q., Hass P.E., Heldens S., Heang A., Kim H.S., Klimowski L., Jin Y., Johnson S., Lee J., Huang A., Kim H.S., Klimowski L., Jin Y., Johnson S., Lee J., Lewis L., Liao D., Mark M., Robbie E., Sanchez C., Schoenfeld J., Lewis L., Liao D., Mark M., Robbie E., Sanchez C., Vagts A. Vandlen R., Watanabe C., Wieand D., Woods K., Xie M.H., Yansura D. Vandlen R., Watanabe C., Wieand M., Zhang Z., Goddard A., Wood W.I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-JUL-2004
05-JUL-2004
05-JUL-2004
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HSSP; P00974; IKO9.
GO; GO:0008233; F:peptidase activity;
GO; GO:0004867; F:serine-type endopept
InterPro; IPR007110; Ig-like.
InterPro; IPR003598; Ig-c2.
InterPro; IPR003134; Netrin C.
InterPro; IPR001134; Netrin C.
                  -|- SIMILARITY: Contains 2 BPI
EMBL; AY358142; AAQ88509.1; --
HSSP; P00974; 1K09.
GO; GO:0004867; F:serine-type
                                                                                                                                         "The secreted protein discovery effort to identify novel human sbioinformatics assessment.";
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ORFNames=UNO9235;
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PROSITE; PS00280; BPTI KUNITZ 1; 1.
PROSITE; PS50279; BPTI KUNITZ 2; 2.
PROSITE; PS50835; IG LIKK; 1.
PROSITE; PS50835; NTR; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro; IPR002350; Prot_inh_Kazal.
InterPro; IPR011497; Prot_Inh_Kazal_2
InterPro; IPR00223; Prot_Inh_Kunz-m.
InterPro; IPR008993; TIMP_like.
InterPro; IPR008197; WAP.
                                                                                            Genome Res. 13:2265-2270(2003).
-!- SIMILARITY: Contains 2 BPTI/Kunitz
                                                                                                                                                                                                                        Godowski P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q6UXZ9;
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29; Conserv
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IPR003599;
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27,
27,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 182; DB Pred. No. 3.5e. O; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    endopeptidase inhibitor activity;
                     endopeptidase
                                                                                                                                                                         secreted
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                                                                                                                                                                   initiative (SPDI), a large-scale secreted and transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sequence update)
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                       inhibitor
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                                                                                                 domains
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Euteleostomi; Homo.
                       activity;
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                                                                                                                                                                      proteins:
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                          IEA.
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DAR REPERENCE DE LA COMPANIA DEL COMPANIA DE
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Best Local S
Matches 29
                                                                                                                                                                                                                              -!- SIMILARITY: Contains 2 BPTI/Kunitz in EMBL; AY308804; AAP72503.1; -- HSSP; P00974; 1K09.
GO; GO:000515; F: protein binding; IPI. GO; GO:0005179; P: transforming growth factor for the factor for factor for the fac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRINTS; PRO0003; 4DISULPHCORE.
PRINTS; PRO0759; BASICPTASE.
PRODOM; PD000222; Prot_Inh_Kunz-m; 2.
SMART; SM00409; IG; 1.
SMART; SM00408; IGc2; 1.
SMART; SM00131; KU; 2.
SMART; SM00131; WAP; 1.
SMART; SM00131; WAP; 1.
PROSITE; PS00280; BPTI KUNITZ 1; 1.
PROSITE; PS00280; BPTI KUNITZ 1; 1.
PROSITE; PS50035; IG_LIKB; 1.
PROSITE; PS50035; IG_LIKB; 1.
PROSITE; PS50189; NTR; 1.
Pfam; PF07648; Kazai 2; 1.
Pfam; PF00014; Kunitz BPTI; 2.
Pfam; PF00095; WAP; 1.
ProDom; PD000222; Prot_Inh_Kunz-m; 2
SWART; SM00408; IGC2; 1.
SWART; SM00280; KAZAL; 1.
SMART; SM00131; KU; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q7TQN3 PRELIMINARY;
Q7TQN3;
Q1-OCT-2003 (TrEMBLrel. 25, 01-OCT-2003 (TrEMBLrel. 25, 01-MAR-2004 (TrEMBLrel. 26, Growth and differentiation f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               associated serum protein-1: a novel protein with and follistatin domains.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pfam; PF00014; Kunitz_BPTI; 2.
Pfam; PF00095; WAP; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          InterPro; IPR003598; Ig_c2.
InterPro; IPR001134; Netrin C.
InterPro; IPR002223; Prot Inh I
InterPro; IPR008993; TIMP_like
InterPro; IPR008197; WAP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=22656519; PubMed=12595574; DOI=10.1210/me.2002-0366; Hill J.J., Qiu Y., Hewick R.M., Wolfman N.M.; "Regulation of myostatin in vivo by growth and differentiati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACSLPALQGPCKAYAPRWAYNSQTGQCQSFVYGGCEGNGNNFESREACEESCPFP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    576
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17:1144-1154(2003).
Contains 2 BPTI/Kunitz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chordata;
Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                63912 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             factor-associated serum protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Created)
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Pred. No. 3.5e
LO; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08B42DDD50C3CF81 CRC64;
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No. 3.
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3.5e-13;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             beta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            differentiation factor-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protease inhibitor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IDA.
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RESULT
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Best Local S
Matches 28
                                                                                             Query Match
Best Local S
Matches 28
                                                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR003599; Ig.
InterPro; IPR007110; Ig-like.
InterPro; IPR003598; Ig_c2.
InterPro; IPR003598; Ig_c2.
InterPro; IPR003223; Prot_Inh_Kunz-m.
InterPro; IPR002223; TIMP_like.
Pfam; PF00014; Kunitz BPTi; 2.
PRINTS; PR00759; BASICPTASE.
PRODOm; PD000222; Prot_Inh_Kunz-m; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SMART; SM00217; WAP; 1.
PROSITE; PS00317; 4 DISU
PROSITE; PS00280; BTI K
PROSITE; PS00280; BTI K
PROSITE; PS50279; BTI K
PROSITE; PS50835; IG LIK
PROSITE; PS50835; NTR; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q7LDW0;
05-JUL-2004
05-JUL-2004
05-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Daniels R.J., Peden J.F.,
Tufarelli C., Kearney L.,
Higgs D.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
MEDLINE=21096910; PubMed=11157797; DOI=10.1093/hmg/10.4.339;
Daniels R.J., Peden J.F., Lloyd C., Horsley S.W., Clark K.,
Charles C., Buckle V.J., Doggett N.A., Flint J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Sequence, structure and pathology of the fully annotated terminal Mb of the short arm of human chromosome 16.";
Hum. Mol. Genet. 10:339-352(2001).
-!- SIMILARITY: Contains 2 BPTI/Kunitz inhibitor domains.
                                                                                                                                                                                                                                                                                                                                                                   ProDom, PD000222; Prot_II
SMART; SM00409; IG; 1.
SMART; SM00408; IGc2; 1.
SMART; SM00131; KU; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -|- SIMILARITY: Contains 2 BPTI/Kunitz
EMBL; AE006464; AAK61237.1; -.
HSSP; Q16019; IAAP.
GO; GO:0004867; F:serine-type endopept:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hypothetical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q7LDW0
                                                                                                                                                                                                                                                                  PROSITE; PS00280; BPTI KUNITZ 1;
PROSITE; PS50279; BPTI KUNITZ 2;
PROSITE; PS50835; IG LIKE; 1.
PROSITE; PS50189; NTR; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (Human)
                                                                                                                                                                                                                     Hypothetical
NON_TER
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1 Similarity 51.9%;
28; Conservative
                                                                                                l Similarity
28; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        w
                                EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CSLPALQGPCKAYVPRWAYNSQTGLCQSFVYGGCEGNGNNFESREACEESCPFP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP
DACVLPAVQGPCRGWEPRWAYSPLLQQCHPFVYGGCEGNGNNFHSRESCEDACPVP 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 (TrEMBLrel. 27, Created)
4 (TrEMBLrel. 27, Last seque
)4 (TrEMBLrel. 27, Last annot
                                                                                                                                                                                              491 AA; 52710 MW;
                                                                                                52.3%;
ilarity 50.0%;
Conservative 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                           protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AA;
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BETI KUNITZ_1; 1.

BETI KUNITZ_2; 2.

BETI KUNITZ_2; 2.

IG LIKE; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           63321 MW;
                                                                                                10;
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                                                                                                Score 172; DB 2;
Pred. No. 4.6e-12;
0; Mismatches 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 176; DB 2; 1
Pred. No. 1.8e-12;
9; Mismatches 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Craniata; Vertebrata;
Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kunz-m.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    endopeptidase
                                                                                                                                                                                                0E0954C8DFB66206 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ۳.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       inhibitor activity;
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; Homo.
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Search completed: February 23, Job time: 80 secs
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CC -!- SIMILARITY: Contains 2 BPTI/Kunitz inhibitor domains.
CR MSD; p10646; 1RH.
CR GO; GO:0008233; F:peptidase activity; IEA.
CR GO; GO:0008233; F:peptidase inhibitor activity; IEA.
CR InterPro; IPR007110; Ig-like.
CR InterPro; IPR003598; Ig_c2.
CR InterPro; IPR002350; Prot_Inh Kazal.
CR InterPro; IPR002350; Prot_Inh Kazal.
CR InterPro; IPR008993; Frot_Inh Kunz-m.
CR InterPro; IPR008993; Frot_Inh Kunz-m.
CR InterPro; IPR008993; TMMP_like.
CR InterPro; IPR008197; WAP.
CR Ffam; PF00048; Kazal 2; 1.
CR Ffam; PF00055; WAP; 1.
CR Ffam; PF00014; Kunitz_BPTI; 2.
CR Ffam; PF00095; WAP; 1.
CR FRINTS; PR000759; BASICPTASE.
CR PRINTS; PR000722; Prot_Inh Kunz-m; 2.
CR FRINTS; PR000722; PROT_Inh Kunz-m; 2.
CR FRINTS; PR000731; KU 2.
CR RYART; SM00131; KU 2.
CR SMART; SM00131; KU 2.
CR SMART; SM00131; KU 2.
CR RROSITE; PS00317; 4 DISULFIDE CORE; 1.
CR RROSITE; PS00317; 4 DISULFIDE CORE; 1.
CR RROSITE; PS00317; ADSTI KUNITZ_2; 2.
CR PROSITE; PS00319; NTR; 1.
CR PROSITE; PS00389; NTR; 1.
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Best Local Similarity
Matches 28; Conserv
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01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Putative multivalent protease inhibitor WFIKKN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
TISSUE=Lung;
MEDLINE=21173622; PubMed=11274388; DOI=10.1073/pnas.061028398;
Trexler M., Banyai L., Patthy L.;
"A human protein containing multiple types of protease-inhibitory modules.";
"But a containing modules.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=9606;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                  DACVLPAVQGPCRGWEPRWAYSPLLQQCHPFVYGGCEGNGNNFHSRESCEDACPVP 412
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                                2005, 03:29:39
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-MODEL-frame+_Dal.model_-DEV=xlh
-MODEL-frame+_Dal.model_-DEV=xlh
-Q=/cgn2_1/USPTO_spool/US10038722/runat_18022005_145235_14317/app_query.fasta_1.199
-D=-GenEmbl _QPMT-fastap -SUFFIX=xge -MINMATCH=0.1 -LOOPCL=0 -LOOPEXX=0
-UNITS-abits -START=1 -END=-1 -MATRIX-abits -TRANS-human40.cdi -LIST-45
-DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=25 -MODE=LOCAL
-OUTFMT=pto -NORN-ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=200000000
-USER=US10038722_GCGN_1_14200_grunat_18022005_145235_14317 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -MAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-PGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
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Maximum DB seq length: 2000000000
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Maximum Match 100%
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الله من تن حا
                                                                                                                                                                          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                        Score
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Ygapop 10.0 , Ygapext
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Copyright (c) 1993 - 2005 Compugen Ltd.
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AX812179
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ALIGNMENTS

429 bp DNA linear PAT 02-DEC- 3 from Patent W0030624311 GI:38635810 astoris astoris a; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes mycetales; Saccharomycetaceae; Pichia, Poncin,A., Saudubray,F. and Petchot-Bacque,J.P. cleotide sequences, gene constructs, expression vectors ganisms for secreting a protein such as epi-hne-4, and 4 protein obtained therefrom W0 03062431-A 3 31-JUL-2003; RM S.A. (CH) Location/Qualifiers 1. 429 /organism="Pichia pastoris" /mol_type="unassigned DNA" /db_xref="taxon:4922" 1. 426 /note="unassigned protein product" /codon start=1 /protein id="CAB81809.1"		CDS	source	EATURES	JOURNAL Pa					EFERENCE 1	Sa	BC 85	ORGANISM Pi	OURCE Pi	EYWORDS .		CCESSION AX	EFINITION Se	OCUS AX	K/TZT8X
ρ. ω	<pre>/note="unnamed protein product" /codon start=1 /protein id="CAE81809.1" /db_xref="GI:38635811"</pre>	/organism="Pichia pastoris" /mol_type="unassigned DNA" /db_xref="taxon:4922" 1426	1429	Location/Qualifiers	PATENT: WO 03062431-A 3 31-JUL-2003; DEBIOPHARM S.A. (CH)	pi-hne-4 protein obtained therefrom	icro-organisms for secreting a protein such as epi-hne-4, and	lovel nucleotide sequences, gene constructs, expression vectors and	erard, C., Poncin, A., Saudubray, F. and Petchot-Bacque, J.P.		accharomycetales; Saccharomycetaceae; Pichia.	ukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;	Pichia pastoris	Pichia pastoris		AX812179.1 GI:38635810	AX812179	Sequence 3 from Patent WO03062431.	DNA	

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                                                                                                                                                                                                                                           Local Similarity:
                                                                                                                                                                                                                                                                                                                                                            source
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Ley,A.Charles., Ladner,R.Charles., Guterman,S.Kosow.,
Roberts,B.Lindsay., Markland,W. and Kent,R.Baribault.
Englineered human-derived kunitz domains that inhibit human
neutrophil elastase
Patent: US 563143-A 68 02-SEP-1997;
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                                                      AsnLysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56
                                                                                                                                        GAGGCTTGTAACTTGCCAATCGTCAGAGGTCCATGCATTGCTTTCTTCCCAAGATGGGCT
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EGDFDVAVLPFSNSTNNGLLFINTTIASIAAAEEGVSLDKREACNLPIVRGPCIAFFP
RWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP"
                                                                                                                                                                                                                                                                                                                                /organism="unknown"
/mol_type="unassigned
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US-10-038-722-27 (1-56) x I63563 (1-8590)
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Ley, A. Charles., Ladner, R. Charles., Gut
Roberts, B. Lindsay., Markland, W. and Ke
Engineered human-derived kunitz domain
neutrophil elastase
Patent: US 5663143-A 70 02-SEP-1997;
Location/Qualifiers
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Sequence
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1 (Dases 1 to 8584)

Ley,A.Charles., Ladner,R.Charles., Guterman,S.Kosow.,
Ley,A.Charles., Markland,W. and Kent,R.Baribault.

Roberts,B.Lindsay., Markland,W. and Kent,R.Baribault human
                                                                                                                                                                                                                                                                          Unknown
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1. .8584
                                                                                                                                /organism="unknown"
/mol_type="unassigned
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from patent US 5663143.
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US 5663143.
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US-10-038-722-27 (1-56) x AR022173
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                                   1 (bases 1 to 198)
Morishita, H., Kanamori, T. and Nobuhara, M.
Protease inhibitory polypeptides derived inhibitor and compositions thereof Patent: US 5409895-A 12 25-APR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 198)
Morishita, H., Kanamori, T. and Nobuhara,
Isolated DNA encoding novel protease ir
Patent: US 5792629-A 12 11-AUG-1998;
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Sequence 12 from patent
AR022173
                                                                                                    Unclassified.
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              Location/Qualifiers
1. .198
/organism="unknown"
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/mol_type="unassigned
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RESULT 8
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Sequence 15
AR022176
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AR268979
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Kuriyama, S. and Hasegawa, T.
Cell membrane-directed drugs
Patent: US 6500646-A 27 31-DEC-2002;
Location/Qualifiers
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Query Match: DB:

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REFERENCE AUTHORS TITLE JOURNAL

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ACCESSION VERSION KEYWORDS SOURCE ORGANISM

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AR022173.1

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RESULT 5
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Morishita, H., Kanamori, T. and Nobuhara, M.
Protease inhibitory polypeptides derived
inhibitor and compositions thereof
Patent: US 5409895-A 15 25-APR-1995;
Location/Qualifiers
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AspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsn
                               GCCTGCAATCTCCCCATAGTCCGGGGCCCCTGCCGAGCCTTCATCAAGCTCTGGGCATTT
                                         AlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAlaPhe
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Morishita, H., Kanamori, T. and Nobuhara, M.
DNA fragment, vector containing the DNA f
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Morishita, H., Kanamori, T. and Nobuhara, M.
Isolated DNA encoding novel protease inhibitory
Patent: US 5792629-A 11 11-AUG-1998;
Location/Qualifiers
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Morishita, H., Kanamori, T. and Nobuhara, M.
Protease inhibitory polypeptides derived
inhibitor and compositions thereof
Patent: US 5409895-A 11 25-APR-1995;
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                                                                                                10 GCCTGCAATCTCCCCATAGTCCGGGGCCCCTGCCGAGCCTTCATCCAGCTCTGGGCATTT
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                                                                                                                                                                                                                                                                                                                                                                Unclassified.

1 (bases 1 to 210)

1 (bases 1 to 210)

Morishita,H., Kanamori,T. and Nobuhara,M.

Morpeptide, DNA fragment encoding the same, drug composition containing the same and process for producing the same Patent: US 5589360-A 74 31-DEC-1996;
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I32807
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
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LysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro
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                                                          AspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsn 41
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74 from patent US 5589360.
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/mol_type="unassigned DNA"
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/mol_type="unassigned
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AAGTTCTACTCAGAGAAGGAGTGCAGAGAGTACTGCGGTGTCCCT 174

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Polypeptide, DNA fragment encoding the same, drug composition containing the same and process for producing the same Patent: US 5679770-A 74 21-OCT-1997;
Location/Qualifiers
                                                                                                                      1 (bases 1 to 295)
Morishita,H., Kanamori,T. and Nobuhara,M.
Isolated DNA encoding novel protease inhibitory polypeptide Patent: US 5792629-A 85 11-AUG-1998;
Location/Qualifiers
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NEW POLYPEPTIDE, NEW DNA CODING THE SAME POLYPEPTIDE, PRODUCTION OF NEW POLYPEPTIDE, NEW ENDICING COMPOSITION AND NEW ENZYME INHIBITING NEW POLYPEPTIDE, NEW MEDICING COMPOSITION AND NEW ENZYME INHIBITING OF ARCHITICAL SEQUENCE; GENES.

OS Artificial gene OC Artificial sequence; Genes.

OS Escherichia coli

PN 193084083-A/3

PD 06-APR-1993

PD 13-NOV-1991 JP 1991325220

PR 13-NOV-1990 JP 90P 306745

PI MORISHITA HIDEAKI, KANAMORI TOSHIYUKI, NOBUHARA MASAHIRO PC C12N15/15,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K37/64,A61K3
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PC C12P2:
CC topoli
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Morishita, H., Kanamori, T. and Nobuhar.
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*source: clone=pM551;
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hypothetical: No;
anti-sense: No;
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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MORISHITA, I., KANAMORI, T. and Nobuhara, M.

NEW POLYPEDTIDE, NEW DNA, NEW VECTOR, NEW TRANSFORMANT, NEW MEDICINAL COMPOSITION AND PRODUCTION OF THE NEW POLYPEPTIDE PATENT. JP 193308988-A 1 22-NOV-1993;

MOCHIDA PHARMACEUT CO LTD

OS Artificial gene
OC Artificial gene
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Morishita, H., Kanamori, T. and Nobuhara, M.
Protease inhibitory polypeptides derived
inhibitor and compositions thereof
Patent: US 5409895-A 85 25-APR-1995;
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JP 1993308988-A/1.
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                                                                                                                                                                                                                                                                                            AspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsn
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| mol_type="unassigned
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   (bases 1 to
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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OS Escherichia coli
pN JP 1993308988-A/1
pD 22-NOV-1993
PF 12-MAY-1992 JP 1992146587
CC strandedness: Single;
CC strandedness: Sin
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/product='polypeptide which
activity,
Y54del'.
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/product='polypeptide which
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            RS MORISHITA, MANAMORI, T. and NOBUHARA, M.

RS MORISHITA, NEW DNA CODING THE SAME POLYPEPTIDE, PRODUCTION OF NEW POLYPEPTIDE, NEW MEDICINE COMPOSITION AND NEW ENZYME INHIBITING PALENT: JP 199304083-A 1 06-APR-1993;

ALL PALENT: JP 199304083-A 1 06-APR-1993;

MOCHIDA PHARMACEUT CO LTD

OS ARTIFICIAL Sequence; Genes.

OS Escherichia coli
PN JP 199304083-A/1
PD 06-APR-1993
PP 13-NOV-1991 JP 1991325220
PR 13-NOV-1991 JP 901 306745
PI MORISHITA HIDEBARI, KANAMORI TOSHIYUKI, NOBUHARA MASAHIRO PC C12N15/15, A61K37/64, C07K7/10,C12N1/21,C12N9/99, PC C12N15/70, C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N1/21,C12N
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Isolated DNA encoding novel protease inhi
Patent: US 5792629-A 75 11-AUG-1998;
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/mol_type="unassigned
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Morishita,H., Kanamori,T. and Nobuhara,M. Protease inhibitory polypeptides derived inhibitor and compositions thereof Patent: US 5409895-A 75.25-APR-1995;
              LysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56
                                                                              AspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsn 41
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/db_xref="taxon:32630"
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1 (bases 1 to 339)
Fritz,H., Gebhard,W. and Das,R.
Proteinaseinhibitors, method for their preparation and pharmaceutical compositions containing them
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1 (ritz,H., Gebhard,W. and Das,R.

Proteinaseinhibitors, method for their preparation pharmaceutical compositions containing them Patent: EP 0401508-A 12 12-DEC-1990;
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/mol_type="unassigned DNA"
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/mol_type="unassigned DNA"
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42 LysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56
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PF 13-SEP-2000 JP 2000278172

PF 13-MAY-1989 DE P3915689.3,18-JAN-1990 DE P4001244.1 PI

PR 13-MAY-1989 DE P3915689.3,18-JAN-1990 DE P4001244.1 PI

HANS FLITZ, WOLFGANG GEBHARDT, RATEINDORA DAS

PC C12N15/09,A61K38/55,A61P1/16,A61P7/00,A61P7/04,A61P11/00, PC
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1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

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Copyright (c) 1993 - 2005 Compugen Ltd.
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Sequence 4,	Sequence 4,	Sequence 93,	Sequence 76,	Sequence 14,	Sequence 14,	Sequence 14,	Sequence 86,	Sequence 86,	Sequence 25,	Sequence 6,	Sequence 3,	Sequence 75,	Sequence 75,	Sequence 75,	Sequence 6,	Sequence 3,	Sequence 23	
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ALIGNMENTS

Sequence 20, Application US/08358160
GENERAL INFORMATION:
rthur C.
APPLICANT: GUTERMAN, KODEIC C.
ROBERTS,
MARKLAND
CANT: KENT, Rac
TITLE OF INVENTION: ENGLISHED HOMAN-DERIVED KUNITZ
R OF SEQUENCES: 234
CORRESPONDENCE ADDRESS:
D NEIMARK
: 419
Washi
STATE: District of Columbia
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m
COMPUTER: LEM PC COMPACIBLE
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APPLICATION NUMBER: US/08/358,160
CLASSIFICATION: 514
APPLICATION NUMBER: US 08/133,031
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/009,319
FILING DATE: 26-JAN-1993
PRIOR APPLICATION NUMBER: HS 07/664 989
FILING DATE: 01-MAR-1991
PRIOR APPLICATION DATA:
20
30
FILING DATE: 02-SEP-1988
Y/AGENT 1
REGISTRATION NUMBER: 28,005
I NUMBI
IBDECOMMUNICATION INFORMATION:

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Best Local Similarity
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APPLICATION NUMBER: US 08/133,031
FILING DATE: 13-OCT-1993
PRIOR APPLICATION UMBER: US 08/009,319
APPLICATION NUMBER: US 08/009,319
FILING DATE: 26-JAN-1993
PRIOR APPLICATION DATA:
APPLICATION DATA:
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INFORMATION FOR SEQ ID NO:
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TENERAL INFORMATION:
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LENGTH: 56 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                            FILING DATE: 02-MAR-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/240,160
FILING DATE: 02-SEP-1988
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                 APPLICATION NUMBER: US 0 FILING DATE: 01-MAR-1991 PRIOR APPLICATION DATA:
REGISTRATIÓN NUMBER: 28,005
REFERENCE/DOCKET NUMBER: LET
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-628-5197
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CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE: 16-DEC
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                                                NAME: Cooper, Iver REGISTRATION NUMBER:
                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION:
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419 Seventh Street, N.W. Suite 300
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GUTERMAN, Sonia K.
ROBERTS, Bruce L.
MARKLAND, William
KENT, Rachel-B.
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DOMAINS THAT INHIBIT HUMAN NEUTROPHIL ELASTASE
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Pred. No. 4.7e-26;
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Best Local Similarity 100.0%;
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INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
1 ENIGTH: 141 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent No.
                                                                                                                                                                                                                   CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/133,031
FILING DATE: 13-OCT-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/009,319
FILING DATE: 26-JAN-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/664,989
FILING DATE: 01-MAR-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/487,063
APPLICATION NUMBER: US 07/487,063
APPLICATION NUMBER: US 07/487,063
                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0,

CURRENT APPLICATION DATA:

APPLICATION UMBER: US/08/358,160

PILING DATE: 16-DEC-1994
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                                                                                                                      APPLICATION NUMBER: US 07/240,160 FILING DATE: 02-SEP-1988 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: BROWDY AND NEIMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: ENGINEERED HUMAN-DERIVED KUNITZ
TITLE OF INVENTION: DOMAINS THAT INHIBIT HUMAN NEUTROPHIL ELASTASE
                                                                                                                                                                                      FILING DATE: 02-MAR-
PRIOR APPLICATION DATA:
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                                                   ELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE: I
                                                                 NAME: Cooper, Iver P.
REGISTRATION NUMBER: 28,005
REFERENCE/DOCKET NUMBER: LE
             TELEPHONE: 202-628-5197
TELEFAX: 202-737-3528
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248633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LADNER, Robert C.
GUTERMAN, Sonia K.
ROBERTS, Bruce L.
MARKLAND, William
KENT, Rachel B.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/08/358,160
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                                                                         LEY=1
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Pred. No. 1e-25;
Mismatches
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NFORMATION FOR SEQ ID NO:

19:

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RESULT 4
US-08-358-160-67
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Best Local Similarity
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 141 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: BROWDY AND NEIMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: LEY, Arthur C.
APPLICANT: LADNER, Robert C.
APPLICANT: GUTERMAN, Sonia K.
APPLICANT: ROBERTS, Bruce L.
                                                                                                                                                                                APPLICATION NUMBER: US 07/240,160 FILING DATE: 02-SEP-1988 ATTORNAY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                       PILING DATE: 01-MAR-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
                                                                                                                                                                                                                                                                                                                                                FILING DATE: 26-JAN-1993 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 13-OCT-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/009,319
                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/133,031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: Patentin Rel
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MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: KENT, Rachel B.
TITLE OF INVENTION: ENGINEERED HUMAN-DERIVED KUNITZ
TITLE OF INVENTION: DOMAINS THAT INHIBIT HUMAN NEUTROPHIL ELASTASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: protein
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                                                                                             TELEPHONE: 202-628-5197
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STRANDEDNESS:
TOPOLOGY: line
                                                            TELEPHONE: 204--
TELEPHONE: 202-737-3528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                               NAME: Cooper, Iver P.
REGISTRATION NUMBER: 28,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 16 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/08/358,160 FILING DATE: 16-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: Washington
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                                                          TELEX: 24863
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                                                                                                                                   LEY=1
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US-09-144-428-26
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                   TELEFAX: (312) 913-0002
INFORMATION FOR SEQ ID NO: 26:
                                                                                                                                                      FILING DATE: 04-OCT-1996
ATTORNEY AGENT INFORMATION:
NAME: CHAO, MAYA
REGISTRATION NUMBER: 37,293
REFERENCE/DOCKET NUMBER: 96,7
TELECOMUNICATION INFORMATION:
TELEPHONE: (312) 913-0001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/144,428
FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: WO PCT/US97/03894
FILING DATE: 10-MAR-1997
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/013,106
FILING DATE: 11-MAR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
ADDRESSEE: McDonnell
          MOLECULE TYPE: peptide
                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 57 amino acids
                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 6 FILING DATE: 14-JUN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: CHICAGO
STATE: ILLINO:
                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 08/725,251 FILING DATE: 04-OCT-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: amino acid
                                  TOPOLOGY:
                                               TYPE: amino acid
STRANDEDNESS: no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   87 ACNIPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 141
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MULLER, Daniel K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DELARIA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BAYER CORPORATION, The TAMBURINI, Paul P
                                unknown
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                                                not relevant
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100.0%; Pred. No. 3.1e-25;
tive 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                              US 60/019,793
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US-07-700-526-11
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                                              GENERAL INFORMATION:
APPLICANT: LEY, Ar
APPLICANT: LADNER,
APPLICANT: GUTERMA
                                                                                                                                Sequence 3, Application US/08358160
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Best Local Similarity
                                                                                                                 Patent No.
                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/07/700,526
FILING DATE: 19910816
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: MCGarrigle Jr., Philip L.
REGISTRATION NUMBER: 31,395
REFERENCE/DOCKET NUMBER: 2600.1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 420-3217
                                                                                                                                                                                                                                                                                                                                                                                                              TELEX: 4992659
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 58 amino acids
TYPE: AMINO ACID:
               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Houston, L. L.
APPLICANT: Liu, David Y.
APPLICANT: Kaymakcalan, Zehra
APPLICANT: Kaymakcalan, Zehra
TITLE OF INVENTION: Method for Inhibiting Adhesion of White
TITLE OF INVENTION: Blood Cells to Endothelial Cells
                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE: C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: (415) 658-5239
                                                                                                                                                                                                                                                                                                    Local
                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94608
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                                                                                                                                                                                                                   ACNLPIVRGPCRAFIQLWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
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1400 Fifty-Third Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                    Conservative
ROBERTS, Bruce L. MARKLAND, William KENT, Rachel B.
                                                GUTERMAN,
                                                                  LADNER,
                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                protein
                                                                                Arthur C.
                                                                                                                                                                                                                                                                                                  90.0%;
                                                Robert C.
N, Sonia K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               90.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US/07700526
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 296; DB 4;
Pred. No. 8.9e-23;
                                                                                                                                                                                                                                                                                                Score 296; DB 1
Pred. No. 9e-23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                 DB 1; Length 58
                                                                                                                                                                                                                                                                                  4.
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US-08-358-160-75
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Matches
                                                                                                                                                                              Sequence 75, Application US/08358160 Patent No. 5663143
                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 08/0
FILING DATE: 26-JAN-1993
PRIOR APPLICATION DATA:
APPLICATION UMBER: US 07/6
FILING DATE: 01-MAR-1991
PRIOR APPLICATION NUMBER: US 07/6
FILING DATE: 02-MAR-1990
PRIOR APPLICATION DATA:
APPLICATION UMBER: US 07/2
FILING DATE: 02-MAR-1990
PRIOR APPLICATION UMBER: US 07/2
FILING DATE: 02-SEP-1988
ATTORNEY/AGENT INFORMATION:
NAME: Cooper, Iver P.
                                                                                                                                                              GENERAL INFORMATION:
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NAME: COOPER, IVEL E., 005

REGISTRATION NUMBER: 28,005

REFERENCE/DOCKET NUMBER: LEY=

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION 202-628-5197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTERISTICS:
58 amino acids
ALEB: amino acid
STRANDEDNESS: ST.
TOPOLOGY: 1.
TOLECULE ""
158
                                                                                              APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
APPLICANT: GUTERMAN, SONÍA K.
APPLICANT: ROBERTS, Bruce L.
APPLICANT: MARKLAND, WILLIAM
APPLICANT: KENT, Rachel B.
TITLE OF INVENTION: ENGINEERED HUMAN-DERIVED KUNITZ
TITLE OF INVENTION: DOMAINS THAT INHIBIT HUMAN NEUTROPHIL ELASTASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/133,031
FILING DATE: 13-0CT-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: BROWDY AND NEIMARK
STREET: 419 Seventh Street, N.W. Suite 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/0 FILING DATE: 16-DEC-1994 CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: 202-737-3528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                 51;
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                                                                                                                                                                                                                                                                                                                          ACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                   ACNIPIVRGPCRAFIQIWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 58
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                                                                                                                       LEY, Arthur C.
LADNER, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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                                                                                                                       Robert C.
                                                                                                                                                                                                                                                                                                                                                                                               90.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ENGINEERED HUMAN-DERIVED KUNITZ
DOMAINS THAT INHIBIT HUMAN NEUTROPHIL ELASTASE
234
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                                                                                                                                                                                                                                                                                                                                                                               Score 296; DB 1
Pred. No. 9e-23;
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1; Length 58;
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US-08-358-160-75
                                                                                                                                              Sequence 39, Application US/08463155A Patent No. 5780265
                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NFORMATION FOR SEQ ID NO:
                                                                                                         APPLICANT: Dennis, Mark S.
APPLICANT: Lazarus, Robert A.
TITLE OF INVENTION: KUNITZ TYPE PLASMA KALLIKREIN INHIBITORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: 202-628-5197
TELEPAX: 202-737-3528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PILING DATE: 02-MAR-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/487,063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 0: FILING DATE: 26-JAN-1993 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 13-OCT-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
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                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 02-SEP-1988
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Cooper, Iver P.
REGISTRATION NUMBER: 28,005
REFERENCE/DOCKET NUMBER: LE
STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 58 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 419 Sever CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 07/664,989
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
                                                                                                                                                                                                                                                                                                            2 ACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                                                                              51; Conservative
                                                                                                                                                                                                                                                                                       ACNIPIVRGPCRAFIQIWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             District of Columbia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         E: BROWDY AND NEIMARK
419 Seventh Street, N.W. Suite 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SS: single
linear
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SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                           90.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US 07/240,160
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             75:
                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                             Score 296; DB 1
Pred. No. 9e-23;
                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 58;
                                                                                                                                                                                                                                                                                                                                                              4.
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US-08-463-432B-39
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US-08-463-432B-39
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/463,155A
FILING DATE: 05-Jun-1995
CLASSIFICATION: 435
ATTORNEY/ACPART
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Dennis, Mark S.
APPLICANT: Lazarus, Robert A.
TITLE OF INVENTION: KUNITZ TYPE PLASMA KALLIKREIN INHIBITORS
                                                                                      TELEFAX: 415/952-9881
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO:
                                                 SEQUENCE CHARACTERISTICS LENGTH: 58 amino acids
                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/463,432B
FILING DATE: 05-Jun-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Kubinec, Jeffrey S.
REGISTRATION NUMBER: 36,575
REFERENCE/DOCKET NUMBER: PO
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/225-8228
                                                                                                                                              TELECOMMUNICATION INFORMATION: TELEPHONE: 415/225-8228
                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: Kubinec, Jeffrey S.
REGISTRATION NUMBER: 36,5
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS
     TOPOLOGY: 1.4
                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WinPatin (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEX:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Match 90.0%;
Local Similarity 92.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
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                                                     58 amino acide
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                                                                                                                                                                                                 36,575
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Pred. No. 9e-23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4
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                                       RESULT 12
US-08-206-310A-39
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Best Local Similarity
Matches 51; Conser
Sequence 39, Application US/08206310A Patent No. 5795954
                                                                                                                                                                                                                                Query Match
Best Local S
                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: PCT/US95/00299
FILING DATE: 11 January 1995
PRIOR APPLICATION DATA:
APPLICATION UNBER: 08/179,964
FILING DATE: 11 January 1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/208,264
PRIOR APPLICATION NUMBER: 08/208,264
APPLICATION NUMBER: 09/208,264
TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: (617) 491-43.
TELEFAX: (617) 491-8801
NFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: MARKLAND, William
APPLICANT: LADNER, Robert Charles
TITLE OF INVENTION: KALLIKREIN-INHIBITING "KUNITZ DOMAIN" PROTEINS AND ANALOGUES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Word for Windows 6.1 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 514
PRIOR APPLICATION DATA:
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE: 25 Seg
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                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Cambridge
                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS: single
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                                                                                                                                                                                                                                Similarity
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                                                                                                                            ACNLPIVRGPCRAFIQLWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 58
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E: Yankwich & Associates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  United States of America
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Pred. No. 9e-23;
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                                                                                                                                                                                                                                Score 296; DB 1; Length 58; Pred. No. 9e-23;
                                                                                                                                                                                                              Mismatches
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                                                                                                                                                                                                              Indels
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US-08-398-010A-39
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 51; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent No. 5834244
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 39, Application US/08398010A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO:
                                                                                   COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: WinPatin (Genentech)

CURRENT APPLICATION DATA:
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MEDIOM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: WinPatin (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 58 amino acids
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APPLICANT: Dennis, Mark S.
TITLE OF INVENTION: FACTOR VIIA INHIBITORS FROM KUNITZ DOMAIN
TITLE OF INVENTION: PROTEINS
                APPLICATION NUMBER: US/08/398,010A
FILING DATE: 03-Mar-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Robert A. Lazarus and Ma: TITLE OF INVENTION: FACTOR VIIA INH. TITLE OF INVENTION: DOMAIN PROTEINS
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TELEPHONE: 416/22
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                                                                                                                                                                                                                                                       STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
STATE: California
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TOPOLOGY: Linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 94080
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CITY: South San Francisco
                                                                                                                                                                                                                          ZIP:
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APPLICATION NUMBER:
                                                                                                                                                                                                                                         COUNTRY:
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                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
                                                                                                                                                                                                                          94080
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACNIPIVRGPCRAFIQLWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 58
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                                                                                                                                                                                                                                                                                                                                                                                                   Robert A. Lazarus and Mark S. Dennis VENTION: FACTOR VIIA INHIBITORS FROM KUNITZ
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                                                                                                                                                                                                                                                                                                                        Genentech,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90.0%;
92.7%;
08/206310
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Pred. No. 9e-23;
0; Mismatches
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Query Match
Best Local Similarity
                             Matches
                             51; Conservative
2 ACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                           90.0%;
                          Score 296; DB 2.
Pred. No. 9e-23;
0; Mismatches
                                                          DB 2; Length 58;
                             4; Indels
                             0,
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US-08-398-628A-39

TOPOLOGY:

Linear

TELEX: 910/371-7168 INFORMATION FOR SEQ ID NO:

SEQUENCE CHARACTERISTICS:

TYPE: Amino Acid

NAME: Kubinec, Jeffrey S.
REGISTRATION NUMBER: 36,575
REFERENCE/DOCKET NUMBER: PO8/
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/225-8228
TELEFAX: 415/952-9881

36,575

P0882P1-1

CLASSIFICATION: 435
PRIOR APPLICATION DATA: 08/206310
APPLICATION UNMBER: 08/206310
FILING DATE: 04-MAR-1994
ATTORNEY/AGENT INFORMATION:
NAME: WALLINGTON THEFTON C

SOFTWARE: WinPatin (Ge CURRENT APPLICATION DATA: APPLICATION NUMBER: US FILING DATE: 03-Mar-19

03-Mar-1995

0

COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS

(Genentech) US/08/398,628A

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                                                                                                                                                                                                                                                                                                     RESULT 16
US-09-136-012A-47
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                                                                                                                                                                                                                                                               Sequence 47, Application US/09136012A Patent No. 5994125
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GENERAL INFORMATION:
APPLICANT: Robert
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Patent No. 5880256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: DYAX CORP
APPLICANT: MARKLAND, William
APPLICANT: LADNER, Robert Cha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
                                                                              NUMBER OF SEQUENCES: 73
CORRESPONDENCE ADDRESS:
ADDRESSEE: Yankwich & Associates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 04-MAR-1994
ATTORNEY/AGENT INFORMATION:
NAME: Kubinec, Jeffrey S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/08/399, FILING DATE: 03-Mar-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA: 08/206310
APPLICATION NUMBER: 08/206310
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MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Windatin (Genentech)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS: LENGTH: 58 amino acids
                                                                                                                                         APPLICANT: LADNER, Robert Charles
TITLE OF INVENTION: KALLIKREIN-INHIBITING "KUNITZ DOMAIN" PROTEINS
TITLE OF INVENTION: AND ANALOGUES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech,
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TITLE OF INVENTION: FACTOR VIIA INHIBITORS FROM KUNITZ
TITLE OF INVENTION: DOMAIN PROTEINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
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TELEFAX: 415/--
TELEFAX: 910/371-7168
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CITY: South San Francisco
    COUNTRY:
                                          CITY: Cambridge
                                                           STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: 415/225-8228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REGISTRATION NUMBER: 36, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   51; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                           2 ACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Amino Acid
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Massachusetts
: United States of America
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          California
                                                           130 Bishop Allen Drive, fifth floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                415/952-9881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    90.0%;
92.7%;
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RER: P0882P1-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 296; DB 2
Pred. No. 9e-23;
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US-08-398-628A-39

Sequence 39, Application US/08398628A Patent No. 5863893 GENERAL INFORMATION:

GENERAL INFOR

TITLE OF INVENTION:

ROBERT A. Lazarus and Mark S. Dennis VENTION: FACTOR VIIa INHIBITORS FROM KUNITZ VENTION: DOMAIN PROTEINS

NUMBER OF SEQUENCES:

CORRESPONDENCE ADDRESS: ADDRESSEE: Genentech,

STREET: 460 Point San Bruno Blvd CITY: South San Francisco

COUNTRY:

USA

California

94080

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2 ACNLPIVRGPCIAFFPRWAFDAVKGKCVLPPYGGCQGNGNKFYSEKECREYCGVP 56

ACNLPIVRGPCRAFIQLWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 58

US-08-398-010A-39

TELEFAX: 415/952-9881
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO:

TELEPHONE:

415/225-8228

SEQUENCE CHARACTERISTICS: LENGTH: 58 amino acids

LENGTH: 58 umg

REFERENCE/DOCKET NUMBER: 32,637
REFERENCE/DOCKET NUMBER: POR
TELECOMMUNICATION INFORMATION:

P0882P1-3

NAME: Kubinec, Jeffrey S REGISTRATION NUMBER: 32,

ATTORNEY/AGENT INFORMATION:

FILING DATE:

04-MAR-1994

Matches Query Match

Local

Similarity
51; Conserv

90.0%; llarity 92.7%; Conservative

Score 296; DB 2 Pred. No. 9e-23; 0; Mismatches

DB 2; Length 58; 4;

Indels

<u>۰</u> Gaps

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OMPUTER READABLE FORM:
MEDIUM TYPE: 3.5-inch diskette

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                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 78,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                  Patent No.
                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: MARKLAND, William
APPLICANT: LADNER, Robert Charles
APPLICANT: LADNER, Robert Charles
TITLE OF INVENTION: INHIBITORS OF HUMAN PLASMIN DERIVED
TITLE OF INVENTION: FROM FROM THE KUNITZ DOMIANS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: ZWILDEN,
REGISTRATION NUMBER: 43,310
REFERENCE/DOCKET NUMBER: DYX-
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION 1491-4343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (617) 491-8801
NFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                    SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                               COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: Browdy and Neimark
STREET: 419 Seventh Street N.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: PCT/US95/00299
FILING DATE: 11-January-1995
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: Microsoft Windows
SOFTWARE: Microsoft Word 97 SR-1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/136,012A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 25-Sept PRIOR APPLICATION DATA:
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ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                     MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: YANKWICH, Leon R. REGISTRATION NUMBER: 30,237 NAME: ZWICKER, Kenneth P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 08/208,264 FILING DATE: 10-March-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: lin
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    APPLICATION NUMBER:
                                                                                                                                                           COUNTRY:
                                                                                                                                                                                             CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 ACNIPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                          20004
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                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/08676124
                                                                                                                                                           United States of America
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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linear
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92.7%;
                                                                                                                                                                                                                                                                                 137
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US/08/676,124
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Pred. No. 9e-23;
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 202-737-3528
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                             FILING DATE: 29-JAN-1:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07-JAN-1:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
                                                                                                                                              CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/414, E
FILING DATE: (concurrently here
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/240,136
                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM: MEDIUM TYPE: 3.5-inch diskette
              APPLICATION NUMBER: PCT/US95/00298
FILING DATE: 11-JAN-1995
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: Inhib
TITLE OF INVENTION: From
NUMBER OF SEQUENCES: 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 10-MAR-1994
ATTORNEY/AGENT INFORMATION:
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FILING DATE: 11-JAN-1995
                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: Microsoft Windows
SOFTWARE: Microsoft Word 97 SR-1
                                                                                                                                                                                                                                                                                                                                        ZIP:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE: 11-JA
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                                                                                                                                                                                                                                                                                                                                                                            STATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FENCTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 78, Application US/09414878
). 6071723
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 ACNLPIVRGPCIAFFDRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                                                        02139
                                                                                                                                                                                                                                                                                                                                                                                           Cambridge
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACNIPIVRGPCRAFIQIWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 58
                                                                                                                                                                                                                                                                                                                                                                          Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                        E: Yankwich & Associates
130 Bishop Allen Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DYAX CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LADNER, Robert C
                                                                                                                                                                                                                                                                                                                                                          USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MARKLAND, William
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         202-628-5197
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11-JAN-1994
                                                                                                                                  29-JAN-1999
                                                                                  07-JAN-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Inhibitors of Human Plamin Derived
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                                                                                                  08/676,124
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The Kunitz Domains
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>.</u>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 296; DB 3
Pred. No. 9e-23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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PRIOR APPLICATION DATA:
APPLICATION NUMBER:

08/179,685

FILING DATE:

10-MAR-1994

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US-09-240-136-78
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                                                                                                                 PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/676,124

FILING DATE: 07-JAN-1997

PRIOR APPLICATION DATA:

APPLICATION UMBER: PCT/US95/00298

FILING DATE: 11-DAN-1995

FRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/208,265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-491-4343
TELEFAX: 617-491-8801
INFORMATION FOR SEQ ID NO: 78:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: DYAX CORP
APPLICANT: MARKLAND, William
APPLICANT: LADNER BARATTER
                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5-inch diskette
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Microsoft Windows 98
SOFTWARE: Microsoft Word 97 SR-1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 1. CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: 1i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 58 amino acids
TYPE: amino acid
                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/1:
FILING DATE: 11-JAN-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 11-JAN-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PLICAN: FRANCE. Robert C
PPLICANT: LADNER, Robert C
ITLE OF INVENTION: Inhibitors of Human Plamin Derived
ITLE OF INVENTION: From The Kunitz Domains
ITLE OF SEQUENCES: 139
                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: (concu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: DYJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: YANKWICH, Leon R
REGISTRATION NUMBER: 30,237
                                                                                                                                                                                                                                                                          CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET:
                                                                                                        APPLICATION NUMBER: 08/2 FILING DATE: 10-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                              02139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cambridge
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACNLPIVRGPCRAFIQLWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 58
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/09240136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  130 Bishop Allen Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Yankwich & Associates
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                                                                                                                                                                                                                                                                                         OMBER: US/09/240,136 (concurrently herewith)
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92.7%;
                                                                     08/179,685
30,237
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Pred. No. 9e-23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 3;
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RESULT 20
US-09-638-770A-78
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REFERENCE/DOCKET NUMBER: DYX-
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-491-4343
TELEPAX: 617-491-8801
INFORMATION FOR SEQ ID NO: 78:
SEQUENCE CHARACTERISTICS:
LENGTH: 58 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 90.0%;
Best Local Similarity 92.7%;
Matches 51; Conservative
               TELEPHONE: 617-491-4343
TELEPAX: 617-491-8801
INFORMATION FOR SEQ ID NO: 78:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: 1i
                                                                                                                                           APPLICATION NUMBER: 08/676,124
FILING DATE: 07-JAN-1997
APPLICATION NUMBER: PCT/US95/00298
FILING DATE: 11-JAN-1995
APPLICATION NUMBER: 08/208,265
APPLICATION NUMBER: 08/208,265
FILING DATE: 10-MAR-1994
APPLICATION NUMBER: 08/179,685
FILING DATE: 11-JAN-1994
ATTORNEY/AGENT INFORWATION:
NAME: ZWICKER, Kenneth P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: Microsoft Windows 98
SOPTWARE: Microsoft Word 97 SR-1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/638,770A
                                                                                      NAME: ZWICKER, Kenneth P
REGISTRATION NUMBER: 43,310
REFERENCE/DOCKET NUMBER: DYX-007.2P US-1
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM: MEDIUM TYPE: 3.5-inch diskette
                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACNIPIVRGPCRAFIQLWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ZWICKER, Kenneth P
                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 15-Aug-2000 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: Cambridge
LENGTH: 58 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 130 Bishop Allen Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: Yankwich & Associates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
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Pred. No. 9e-23;
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RESULT 22
US-07-791-213D-8
; Sequence 8, Application US/07791213D
; Patent No. 5409895
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PCT-US92-03132-11
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CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/700,526
FILING DATE: 14-MAY-1991
ATTORNEY/AGENT INFORMATION:
NAME: MCGARTIGLE Jr., Philip L.
REGISTRATION NUMBER: 31,395
REGISTRATION NUMBER: 2600.1
TELECOMMUNICATION: WINDER: 2600.1
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION: (415) 420-3217
                                                                                                                                                                                                                                             PCT-US92-03132-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 11, Application GENERAL INFORMATION:
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Best Local Similarity
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/03132
FILING DATE: 1920416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Houston, L. L.
APPLICANT: Liu, David Y.
APPLICANT: Kaymakcalan, Zehra
                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: Method for Inhibiting Adhesion of White TITLE OF INVENTION: Blood Cells to Endothelial Cells
                                                                                                                                                                                                                                                              MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: (415) 658-5239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                             STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                            LENGTH:
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                                                                                                                                 2 ACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
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                                                                                                              ACNLPIVRGPCRAFIQLWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP
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1400 Fifty-Third Street
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linear
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Pred. No. 9e-23;
                                                                                                                                                                                          Score 296; DB 5
Pred. No. 9e-23;
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US-08-293-150A-8
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                                                                                                                                                                                                                                                                                                                     Sequence 8, Application US/08293150A
Patent No. 5792629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: MORISH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (703) 836-2021
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 66 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: 435
PRIOR APPLICATION DATA:
RAPPLICATION NUMBER: JP 2-5
PILING DATE: 13-NOV-1990
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: MORISHITA
APPLICANT: KANAMORI,
APPLICANT: NOBUMARA,
TITLE OF INVENTION: E
TITLE OF INVENTION: S
TITLE OF INVENTION: TITLE OF INVENTION: TITLE OF INVENTION: TITLE OF INVENTION: TITLE OF SEQUENCES:
                                                                                                                                                         APPLICANT: KANAMORI, 7
APPLICANT: NOBURARA, N
TITLE OF INVENTION: PC
TITLE OF INVENTION: ST
TITLE OF INVENTION: TH
TITLE OF INVENTION: TH
TITLE OF INVENTION: TH
NUMBER OF SEQUENCES: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Meuth, Donna M
REGISTRATION NUMBER: 36,607
REFERENCE/DOCKET NUMBER: 02
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/791,213D
FILING DATE: 13-NOV-1991
CINCIPETENTON. A26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: 15
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                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: (703)
                                                                    STREET: P.O. Box
CITY: Alexandria
STATE: Virginia
                                                   STATE: Virginia COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: United States
ZIP: 22313-1404
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STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Burns, Doane, Swecker & Mathis STREET: P.O. Box 1404
                                                                                                                         ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        amino acid
GY: linear
 READABLE FORM:
TYPE: Floppy
                                                                                                   E: BURNS, DOA
P.O. Box 1404
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                MORISHITA, Hideaki
KANAMORI, Toshinori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MORISHITA, Hideaki
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Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ) 836-2021
The NO: 8:
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, DIA FRAGMENT ENCODING THE
SAME AND PROCESS FOR PRODUCING THE SAME,
INHIBITION PROCESS, DRUG COMPOSITION AND
TREATING USING THE SAME
                                                                                                                       DOANE,
                                                                                                                                                                         , Masahiro
POLYPEPTIE, DNA FRAGMENT ENCODING THE
SAME AND PROCESS FOR PRODUCING THE SAME,
INHIBITION PROCESS, DRUG COMPOSITION AND
TREATING USING THE SAME
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Pred. No. 1e-22;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1; Length 66;
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                                                                                                                                                                                               AND ENZYME METHODS OF
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METHODS OF
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COMPUTER: IBM PC compatible

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PRIOR APPLICATION DATA:

APPLICATION NUMBER: JP 2-306745

PILING DATE: 13-NOV-1990

ATTORNEY/AGENT INFORMATION:

NAME: Meuth, Donna M.

REGISTRATION NUMBER: 36,607

REGISTRATION NUMBER: 029650-

REFERENCE/DOCKET NUMBER: 029650-

TELECOMMUNICATION: 036-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-293-150A-8
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INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 66 amino acids
TYPE: amino acid
TYPE: amino acid
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                             SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/972,387
FILING DATE: 19921105
CLASSIFICATION: 435
CLASSIFICATION: 435
                                           ATTORNEY/AGENT INFORMATION:
NAME: MUTPHY Jr., Gerald M.
REGISTRATION NUMBER: 28,977
REFERENCE/DOCKET NUMBER: 1110-124P
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Birch, Stewart, Kolasch & Birch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Kanamori, Toshinori
APPLICANT: No. 5451659uhara, Masahiro
TITLE OF INVENTION: Polypeptide, DNA Fragment Encoding the
TITLE OF INVENTION: Same, Drug Composition Containing the Same and Process for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/791,213
FILING DATE: 13-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
TELEPHONE: /v3 - 241 - 2848
                                                                                                                                                                                                                                                                                                                                                                                   STREET: 301 N. Washington St. CITY: Falls Church
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 19-AU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               51;
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                                                                                                                                                                                                                                                                                                                                22046-0747
                                                                                                                                                                                                                                                                                                                                                                     Virginia
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                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Morishita, Hideaki
Kanamori, Toshinori
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NO: 8:
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RESULT 25
US-08-431-412-76
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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                                                                                                                                                              TELEFAX: 703-241-2848
TELEX: 248345
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                       OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 68 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/972,387
FILING DATE: 05-NOV-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Morishita, Hideaki
APPLICANT: Kanamori, Toshinori
APPLICANT: No. 558936uhara, Masahiro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: protein FRAGMENT TYPE: internal
                                                   FEATURE:
                                                             MOLECULE TYPE: protein FRAGMENT TYPE: internal
                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: Protein LOCATION: 1..68 OTHER INFORMATION: OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Falls Church
STARE: Virginia
                                                                                                                                                                                  TELEPHONE: 703-241-2848
                                                                                                                                                                                                                                                REGISTRATION NUMBER: 28,977
REFERENCE/DOCKET NUMBER: 1110-124P
                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 2
LOCATION: 1..68
OTHER INFORMATION: /label= sequence
                  NAME/KEY:
LOCATION:
                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                                                                               NAME: Murphy Jr., Gerald M.
                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   51;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22046-0747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                : 68 amino acids
AMINO ACID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/08431412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
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Morishita, Hidden
Toshinori
Toshinori
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                Protein
                                                                                                   linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Polypeptide, DNA Fragment Encoding the Same, Drug Composition Containing the Producing the Same
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92.7%;
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/note= "AN68 polypeptide"
                                                                                                                                                                                                                                                                                                                                                                                                US/08/431,412
                                                                                                                                                                 76:
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Pred. No. 1e-22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1; Length 68;
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Search completed: February 23, 2005, 03:30:38 Job time : 25 secs
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                                                                                                                                                                  Query Match 90.0%; Score 296; DB 1; Length 68; Best Local Similarity 92.7%; Pred. No. 1e-22; Matches 51; Conservative 0; Mismatches 4; Indels 0; Gaps
                                                                                   0;
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Database
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 200000000
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Searched:
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Gapop 10.0 , Gapext 0.5
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[1 /cgn2_6/ptodata/1/paa/US06_6

2 /cgn2_6/ptodata/1/paa/US07_6

3: /cgn2_6/ptodata/1/paa/US07_
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/ Cgm2_6/ptodata/1/paa/US082_COMB.pep: *
/ Cgm2_6/ptodata/1/paa/US083_COMB.pep: *
/ Cgm2_6/ptodata/1/paa/US086_COMB.pep: *
/ Cgm2_6/ptodata/1/paa/US096_COMB.pep: *
/ Cgm2_6/ptodata/1/paa/US090_COMB.pep: *
/ Cgm2_6/ptodata/1/paa/US091_COMB.pep: *
/ Cgm2_6/ptodata/1/paa/US091_COMB.pep: *
/ Cgm2_6/ptodata/1/paa/US092_COMB.pep: *
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/ Cgm2_6/ptodata/1/paa/US101_COMB.pep: *
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6/ptodata/1/paa/US081
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357.423 Million cell updates/sec
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

4444 443 5443	22222222222222222222222222222222222222	NO	Result
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999000		m m m o o o o o o o o o o o o o o o o o	Query
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US-09-218-913D-26 US-09-441-966-26 US-09-441-966A-26 US-09-441-966B-26 US-09-974-026-26 PCT-US03-17665-31 US-07-687-300-11	-08-849-406-22 -10-038-722-26 -10-038-722-26 -10-456-986A-4 -10-456-986A-4 -10-456-986A-4 -10-456-986A-4 -10-456-986A-4 -10-456-986A-4 -10-456-986A-4 -10-456-986A-7 -108-849-406-7 -108-849-406A-7 -108-849-406A-7 -108-849-406A-7 -108-849-406A-7 -108-849-108-7 -108-118-7 -108-	-US03-17665-49 -US03-17665-49 -U8-849-406-27 -U8-849-406-72 -10-361-997-43 -10-361-997-75	;
11, 12 e e 26, 31, 11, 11, 11, 11, 11, 11, 11, 11, 11,	999999 9999999 8884 777777777411 9884 7777777777	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7

ALIGNMENTS

PCT-US03-17665-49
PCT-US03-17665-49
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PCT-US03-17665-49
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PCT-US03-17665-49
PCT-US03-17665

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US-08-849-406-27; Sequence 27, Application US/08849406
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                                                                             Best Loc
Matches
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Best Local Similarity
Matches 56; Conserv
                                                                                                                                                                                                                                                                                                     NAME: COOPER, IVER P.
REGISTRATION NUMBER: 28,005
REFERENCE/DOCKET NUMBER: LEY=
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-628-5197
TELEPAX: 202-737-3528
INFORMATION FOR SEQ ID NO: 27:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 49
                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: EPI-HNE-4 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ENGTH: 56
                                                                                              Local
                                                                                                                                                                                 MOLECULE TYPE: peptide SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: PCT/US95/16349
FILING DATE: 15-DEC-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/849,406
FILING DATE: 21-Uul-1999
CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: ENGINEERED HUMAN-DERIVED KUNITZ
DOMAINS THAT INHIBIT HUMAN NEUTROPHIL ELASTASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                               56;
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                                                                                                Similarity
                 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                           TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Washington
STATE: District of Columbia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: BROWDY AND NEIMARK, P.L.L.C. STREET: 624 Winth Street, N.W. Suite 300
                                                                                                                                                                                                                          TOPOLOGY: linear
                                                                                                                                                                                                                                                                                        LENGTH: 56 amino acids
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                                                                             100.0%; Score 329; DB 12; llarity 100.0%; Pred. No. 1.8e-33; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LADNER, ROBERT C.
GUTERMAN, SONIA K.
ROBERTS, Bruce L.
MARKLAND, William
KENT, Rachel B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Arthur C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 329; DB 1; 100.0%; Pred. No. 1.8e-33;
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                                                                                                                     Length 56;
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US-08-849-406A-27
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US-08-849-406A-27
                                                                                                                                                                                                                                                                                                               US-10-038-722-27
                                                                                                                                                                                                                                                              Sequence 27, Application US/10038722 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
APPLICANT: KENT, Rachel B.
APPLICANT: ROBERTS, Bruce L.
APPLICANT: LANNER, Robert C.
TITLE OF INVENTION: ITI-DI KUNITZ DOMAIN MUTANTS
FILE REFERENCE: LEY=1B
CURRENT EPPLICATION NUMBER: US/10/038,722
PRIOR APPLICATION NUMBER: US 08/849,406
                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                        APPLICANT: LEY, Arthur C. APPLICANT: GUTERMAN, Sonia K. APPLICANT: MARKLAND, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 27:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/849,406A
FILING DATE: 21-U1-1999
CLASSIFICATION DATA:
APPLICATION NUMBER: PCT/US95/16349
PRIOR APPLICATION NUMBER: PCT/US95/16349
FILING DATE: 15-DEC-1995
APPLICATION NUMBER: PCT/US95/16349
FILING DATE: 15-DEC-1995
APPLICATION NUMBER: PCT/US95/16349
FILING DATE: 15-DEC-1995
ATTORNEY/AGENT INFORMATION:
NAME: COOPET, IVET P.
REFIGENCE/DOCKET NUMBER: LEY-1A
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GUTERMAN, SONIA K.
ROBERTS, BRUCE L.
MARKLAND, William
KENT, Rachel B.
TITLE OF INVENTION: ENGINEERED HUMAN-DERIVED KUNITZ
DOMAINS THAT INHIBIT HUMAN NEUTROPHIL ELASTASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 27:
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APPLICANT:
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1 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
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STATE: District of Columbia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: 202-628-5197
TELEFAX: 202-737-3528
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/08849406A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 329; DB 12; ilarity 100.0%; Pred. No. 1.8e-33; Conservative 0; Mismatches 0;
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GUTERMAN, Sonia K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Arthur C.
                                                                                                   AS THE INHIBITORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 56;
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PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
NUMBER OF SEQ ID NOS: 84
SOPTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 40
LENGTH: 56
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Polypeptide sequence
US-10-361-997-40
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US-10-361-997-40
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LENGTH: 56
                                                                                                                                                                                                                                                                                                        Sequence 49, Application US/10456986A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
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PRIOR APPLICATION NUMBER: PCT/US95/16349
PRIOR FILING DATE: 1995-12-15
PRIOR APPLICATION NUMBER: US 08/358,160
PRIOR PILING DATE: 1994-12-16
PRIOR FILING DATE: 1994-12-16
PRIOR FILING DATE: 1994-12-16
PRIOR FILING DATE: 1994-12-16
                                                                                  APPLICANT: Williams, Anthony
TITLE OF INVENTION: Prevention and Reduction of Blood Loss
FILE REFERENCE: 3421.1001-002
CURRENT APPLICATION NUMBER: US/10/456,986A
CURRENT FILING DATE: 2003-66-06
PRIOR APPLICATION NUMBER: 60/387,239
PRIOR FILING DATE: 2002-66-07
PRIOR FILING DATE: 2002-66-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Ladner, Robert Charles
APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE 3421.1015-000
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
                                                                                                                                                                                                                                                               APPLICANT: Ladner, Robert C. APPLICANT: Ley, Arthur C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn version 3.1
PRIOR APPLICATION NUMBER: 60/407,003
PRIOR FILING DATE: 2002-08-28
NUMBER OF SEQ ID NOS: 54
SOFTWARE: FASTSEQ for Windows Version 4.0
                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: Epi-HNE-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Artificial Sequence FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                56;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
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Hirani, Shirish
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 329; DB 29; ilarity 100.0%; Pred. No. 1.8e-33; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%;
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Pred. No. 1.8e-33;
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US-10-931-153-23
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                                                                                                                                                                                                                                                                                                                                                                                      RESULT 8
US-08-849-406-74
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LENGTH: 56
TYPE: PRT
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LENGTH: 56
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Ley, Arthur C.
APPLICANT: Sato, Aaron K.
APPLICANT: Ladner, Robert C.
APPLICANT: Ladner, Robert C.
APPLICANT: Stochl, Mark
TITLE OF INVENTION: POLY-PEGYLATED PROTEASE INHIBITORS
FILE REFERENCE: 10280-119001
CURRENT APPLICATION NUMBER: US/10/931,153
CURRENT FILING DATE: 2003-08-29
PRIOR APPLICATION NUMBER: US 60/498,845
PRIOR FILING DATE: 2003-08-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 60/598,967
PRIOR FILING DATE: 2004-08-04
NUMBER OF SEQ ID NOS: 25
SOPTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: Synthetically generated peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                             APPLICANT: LEY, Arthur C.
LADNER, Robert C.
GUTERMAN, Sonia K.
ROBERTS, Bruce L.
WARKLAND, William
KENT, Rachel B.
TITLE OF INVENTION: ENGINEERED HUMAN-DERIVED KUNITZ
DOMAINS THAT INHIBIT HUMAN NEUTROPHIL ELASTASE
ZIP: 20001
COMPUTER READABLE FORM:
MEDIUM TYPE: Flopp
                                                                                                                                                             NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                   74, Application US/08849406
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      56; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                               CITY: Washington
STATE: District of Columbia
                                                                                                                       ADDRESSEE: BROWDY AND NEIMARK, P.L.L.C. STREET: 624 Ninth Street, N.W. Suite 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                               COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 329; DB 35; 100.0%; Pred. No. 1.8e-33;
  Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 35;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-849-406-74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 74, Application US/08849406A APPLICANT: LEY, Arthur C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity Matches 56; Conserv
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                                                                                                                                                           PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                          COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC Compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/16349
FILING DATE: 15-DEC-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KENT, Rachel B.
TITLE OF INVENTION: ENGINEERED HUMAN-DERIVED KUNITZ
DOMAINS THAT INHIBIT HUMAN NEUTROPHIL ELASTASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: peptide SEQ ID NO: 74:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: 202-737-3528
MATION FOR SEQ ID NO: 74:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
NAME: Cooper, Iver P.
REGISTRATION NUMBER: 28,005
REFERENCE/DOCKET NUMBER: LEY=1A
TELECOMMUNICATION INFORMATION:
                                                                                          ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
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                                                                                                                                                                               APPLICATION NUMBER: US/08/849,406A FILING DATE: 21-Jul-1999 CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                            CITY: Washington
STATE: District of Columbia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Cooper, Iver P. REGISTRATION NUMBER: 28,005
                                                                                                                APPLICATION NUMBER: PCT/US95/16349 FILING DATE: 15-DEC-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: BROWDY AND NEIMARK, P.L.L.C. STREET: 624 Ninth Street, N.W. Suite 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 141 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: 202-628-5197
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      : LEY, Arthur C.
LADNER, Robert C.
GUTERMAN, Sonia K.
ROBERTS, Bruce L.
MARKLAND, William
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SYSTEM: PC-DOS/MS-DOS
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Pred. No. 4.6e-33;
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                                                                             US-10-361-997-59
                                                                                                                           RESULT 11
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APPLICANT: ROBERTS, ROBERT C.
APPLICANT: LADNER, ROBERT C.
TITLE OF INVENTION: ITI-D1 KUNITZ DOMAIN MUTANTS AS FILE REFERENCE: LEY=1B
CURRENT APPLICATION NUMBER: US/10/038,722
CURRENT FILING DATE: 2002-01-08
PRIOR APPLICATION NUMBER: US 08/849,406
PRIOR FILING DATE: 1999-07-21
PRIOR APPLICATION NUMBER: PCT/US95/16349
PRIOR APPLICATION NUMBER: PCT/US95/16349
PRIOR FILING DATE: 1995-12-15
PRIOR FILING DATE: 1995-12-16
PRIOR APPLICATION NUMBER: US 08/358,160
PRIOR PILING DATE: 1994-12-16
NUMBER OF SEQ ID NOS: 129
COLUMNER: DESCRIPTION OF 12 CONTROL OF 12 CON
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Sequence 59, Application US/10361997 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn version 3.1 SEQ ID NO 74
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: LEY,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: BstBI-AatII-EcoRI cassette for expression of Epi-HNE-4 (Table 252 OTHER INFORMATION: )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Artificial Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ENGTH: 141
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MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO:
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LENGTH: 141 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                             86 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 141
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                                                                                                                                                                                                                                                                                                                                                                                                     56;
                                                                                                                                                                                                                                                                                       1 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GUTERMAN, Sonia K.
MARKLAND, William
KENT, Rachel B.
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                                                                                                                                                                                                                                                                                                                                                                                             100.0%; ilarity 100.0%; Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                 Score 329; DH 25;
Pred. No. 4.6e-33;
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APPLICANT: Ladner, Robert Charles
APPLICANT: Ley, Arthur C.
APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1015-000
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07

NUMBER OF

SEQ ID NOS: 84

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US-10-361-997-71
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                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 13
                                                                                                                                                    APPLICANT: Ladner, Robert Charles
APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1015-000
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
INUMBER OF SEQ ID NOS: 84
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-361-997-61
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Tocal Similarity
Conserv
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                                                                                                                                                                                                                                                                                                                                                        Sequence 71, Application US/10361997 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local
                                                                                                                                          SEQ ID NO 71
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CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
NUMBER OF SEQ ID NOS: 84
SOPTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Ladner, Robert Charles
APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1015-000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
  OTHER INFORMATION:
OTHER INFORMATION:
                                                                            TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Artificial Sequence FEATURE:
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                                                           FEATURE:
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                                                                                                                   LENGTH: 694
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llarity 100.0%;
Conservative 0
Amino acid sequence encoded by NotI cassette of pDB2300X2 with DX890 (Nterm) and Cterm linker ready for second DX890
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Pred. No. 2.2e-32;
); Mismatches 0;
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Pred. No. 2.2e-32;
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APPLICANT: Ladner, Robert Charles
APPLICANT: Ley, Arthur C.
FITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1015-000
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR PILING DATE: 2002-02-07
NUMBER OF SEO ID NOS: 84
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 46
LENGTH: 729
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APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1015-000
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
PRIOR FILING DATE: 2002-02-07
PRIOR FILING DATE: 2002-02-07
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                                                                                          Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 46, Application US/10361997 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 75, Application US/10361997 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
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Best Local Similarity
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Best Local Similarity
                                                                                                           Query Match
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                                                                                                                                                                  OTHER INFORMATION: Secreted product
                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                  ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: Amino acid sequence of OTHER INFORMATION: DX-890::(GGS)4GG::HA::(GGS)4GG::DX890
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                                         1 EACNLPIVRGPC
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                                                                                              Similarity
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ilarity 100.0%;
Conservative 0
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                                                      rvative 0; Mismatches 39;
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                                                                                            100.0%; Score 329;
100.0%; Pred. No.
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Pred. No. 2.3e-32;
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Pred. No. 2.4e-32;
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Search completed: February 23, 2005, 03:34:59 Job time : 185 secs

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Minimum DB seq length: 0
Maximum DB seq length: 2000000000 Title: Perfect score: Database : Total number of hits satisfying chosen parameters: Searched: Scoring table: Sequence: Run on: OM protein - protein search, using sw model PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:* BLOSUM62 Gapop 10.0 , Gapext 0.5 283416 seqs, 96216763 residues US-10-038-722-27 329 February 23, 2005, 03:10:59; Search time 23 Seconds (without alignments) 234.267 Million cell updates/sec 1 EACNLPIVRGPCIAFFPRWA......QGNGNKFYSEKECREYCGVP 56 GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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1 29	135	136	138	138	138	140	144	146	146	146	146	146	148	150	150	151	152	154	155	155	155	155	257	258	261	264	269	272	296	Score	
	41.0	41.3	41.9	41.9	•		43.8	44.4	44.4	44.4	44.4	44.4	45.0	•	45.6	45.9	•		47.1	47.1	47.1	47.1	78.1		79.3		81.8	82.7	90.0	Match	Query
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	hihitor	proteinase inhibit	hypothetical prote	Alzheimer's diseas	ი	proteinase inhibit		hypothetical prote	Alzheimer's diseas	\mathbf{L}	Alzheimer's diseas		Kunitz-type protei		Alzheimer's diseas	proteinase inhibit	gamma-1-microglobu	hepatocyte growth	amyloid precursor-	beta	~	amyloid precursor	inter-alpha-trypsi	alpha-1-microglobu			_	alpha-1-microglobu	ha-1-microglo	Description	

45	44	43	42	41	40	39	38	37	36	35	34	33	32·	3 1	30
126	126	127	128	129	129	129	132	132	133	133	133	133	133	134	135
38.3	38.3	38.6	38.9	39.2	39.2	39.2	40.1	40.1	40.4	40.4	40.4	40.4	40.4	40.7	41.0
62	57	63	67	300	299	235	372	58	3176	122	59	59	57	1558	65
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A44180	TIEPVB	TIFFAF	TIBOC	S12143	146937	A54951	JC2556	TIHABK	CGHU3A	A55115	A59399	TIEPED	B59399	C89114	TIVIVC
taicatoxin serine	venom basic protei	acrosin inhibitor	trypsin inhibitor,	lipoprotein-associ	tissue factor path	tissue factor path	alpha-1-microglobu	isoinhibitor K (BP	collagen alpha 3 (V	uterine plasmin/tr	Long epsilon-dendr	venom basic protei	short epsilon-dend	protein C37C3.6a [venom basic protei

ALIGNMENTS

A; Molecule type: DNA A; Residues: 1-352 verity A; Cross-references: UNIPROT: P02760; EMBL: X54816; NID: g24475; PIDN: CAA38585.1; PID: g82561 R; Diarra-Mehrpour, M.; Bourguignon, J; Sesbouee, R.; Salier, J.P.; Leveillard, T.; Mart Eur. J, Biochem. 101, 131-139, 1990 A; Title: Structural analysis of the human inter-alpha-trypsin inhibitor light-chain gene A; Accession: \$10778; MUID: 9036621; PMID: 1656200 A; Reference number: \$10778; MUID: 9036621; PMID: 1656200 A; Residues: preliminary A; Molecule type: DNA A; Residues: 1-202 vDIA A; Residues: 1-302 vDIA A; Nolecule type: protein A; Reference number: A90074; MUID: 8476849; PMID: 619862 A; Nolecule type: protein A; Nolecu	RESULT 1 HCHU Alpha-1-microglobulin/inter-alpha-trypsin inhibitor precursor [validated] - human alpha-1-microglobulin/inter-alpha-trypsin inhibitor precursor [validated] - human N.Alternate names: bikunin; complex-forming glycoprotein heterogeneous in charge (HC) rich protein N.Contains: alpha-1-microglobulin (protein HC); inter-alpha-trypsin inhibitor C.Species: Homo sapiens (man) C.Date: 15-Oct-1982 #sequence_revision 30-Jun-1987 #text_change 09-Jul-2004 C.Accession: \$13433; \$10778; A33642; A90074; A90225; A90686; PN0450; B39079; A61580; CACCESSION: \$13433; S10778; A33642; A90074; A90225; A90686; PN0450; B39079; A61580; B301. Chem. Hoppe-Seyler 371, 1185-1196, 1990 A.Foference number: \$13433; MUID:91214554; PMID:1708673 A.Rocession: \$13433; MUID:91214554; PMID:1708673
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A; Molecule type: protein
A; Residues: 206-214, 'X' <ATM1>
R; Enghild, J.J.; Salvesen, G.; Hefta, S.A.; Thogersen, I.E
J. Biol. Chem. 266, 747-751, 1991
A; Title: Chondroitin 4-sulfate covalently cross-links the A; Reference number: A39079; MUID:91093267; PMID:1898736
A; Accession: B39079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: protein
A; Residues: 206-290, 'VI', 293-342, 'E', 344-350 <REI>
R; Atmani, F.; Lacour, B.; Strecker, G.; Parvy, P.; Drueeke, T.;
Biochem. Biophys. Res. Commun. 191, 1158-1165, 193
A; Title: Molecular characteristics of uronic-acid-rich protein,
A; Reference number: PN0450; MUID: 93221481; PMID: 8466493
A; Accession: PN0450
                                                                                  A;Reference number: S28928; MUID:93039735; PMID:1384548
A;Accession: S28930
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A;Residues: 214,'X',216-222,'X' <CHI>
R;McKeehan, W.L.; Sakagami, Y.; Hoshi, H.; McKeehan,
J. Biol. Chem. 261, 5378-51,8', 1986
A;Title: Two apparent human endothelial cell growth t
A;Reference number: A92583; MUID:86168278; PMID:30074
A;Accession: B25604
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A;Title: Human inter-alpha-trypsin inhibitor: localization (A;Reference number: A90686; MUID:85225968; PMID:2408638
A;Accession: A90686
                                                                                                                                                R;Malki, N.; Balduyck, M.; Maes, P.; Capo
Biol. Chem. Hoppe-Seyler 373, 1009-1018,
A;Title: The heavy chains of human plasma
                                                                                                                                                                                                                                                                                                                                        R:Vetr, H.; Koegler, M.; Gebhard, W.
REBS Lett. 245, 137-140, 1989
A;Title: The domain structure of the inhibitor subunit of human inter-alpha-trypsin inh.
A;Reference number: S03552; MUID:89171290; PMID:2466696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: mRNA
A; Residues: 1-218; 'HW' <TRA>
A; Residues: 1-218; 'HW' <TRA>
A; Rote: this mRNA sequence appears to contain errors after r.
A; Note: this mRNA sequence appears to contain errors after r.
B; Calero, M, Escribano, J.; Grubb, A.; Mendez, E.
J. Biol. Chem. 269, 384-389, 1994
A; Title: Location of a novel type of interpolypeptide chain
A; Reference number: A53110; MUID:94103241; PMID:7506257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Molecule type: protein
A;Residues: 206-225 < Edg2>
R;Traboni, C.; Cortese, R.
Nucleic Acids Res. 14, 6340, 1986
A;Title: Sequence of a full length cDNA coding for human
A;Reference number: A25303; MUID:86312901; PMID:2428011
A;Accession: A25303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Molecule type: protein
A;Molecule type: protein
A;Molecule type: 206-214, 'X',216-230, 'X',232-239, 'X',241-248, 'XX',251-252, 'X',254
A;Residues: 206-214, 'X', 216-230, 'X', 232-239, 'X', 241-248, 'XX',251-252, 'X',254
R;Enghild, J.J.; Thogersen, I.B.; Pizzo, S.V.; Salvesen, G.
J. Biol. Chem. 264, 15975-15981, 1989
J. Biol. Chem. 264, 15975-15981, 1989
J. Biol. Chem. 264, 15975-15981, 1989
J. Filtle: Analysis of inter-alpha-trypsin inhibitor and a novel trypsin inhibitor A;Reference number: A92736; MUID:89380192; PMID:2476436
A;Accession: C34245
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R;Chirat, F.; Balduyck, M.; Mizon, C.; Laroui, S.; Sautiere, Int. J. Biochem. 23, 1201-1203, 1991
A;Title: A chondroitin-sulfate chain is located on serine-10 A;Reference number: A61580; MUID:92175157; PMID:1794445
A;Accession: A61580
                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Molecule type: protein A; Residues: 45-57 < CAL1>
                                          A;Molecule
                                                                                                                                                                                                                                     A; Residues: 206-352 < VET2>
                                                                                                                                                                                                                                                            A; Molecule type:
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                                                                                                                                                                                                                                                                                           Status: nucleic
                                                                 preliminary
-ype: protein
206-215 <MAI.
                                                                                                                                                                                                                                                                                     acid sequence
                                                                                                                                                                                                                                                                                        not shown
                                                                                                                                                                               Capon, C.; Mizon, 018, 1992
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PMID:3007499
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A; molecule type: protein
A; Residues: 206-217 < WIS>
R; Calero, M; Mendez, E.; Garcia, E.
Biochim. Biophys. Acta 1249, 91-99, 1995
A; Title: Expression of the human complex-forming glycoprotein
A; Reference number: 855688; MUID:95284116; PMID:7539295
A; Accession: 855688
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A;Rolecule type: protein
A;Residues: 206-214,'X',216-230 <ATM2>
A;Residues: 206-214,'X',216-230 <ATM2>
R;Akerstroem, B.; Bratt, T.; Enghild, J.J.
FEBS Lett. 362, 50-54, 1995
A;Title: Formation of the alpha(1)-microglobulin chromophore
A;Title: Formation of the Jpha(1)-microglobulin chromophore
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A;Rosidues: 302-352 <BOU>
A;Rosidues: 302-352 <BOU>
A;Cross-references: GB:M11562; NID:g186587; PIDN:AAA59194.1; PID:g307077
A;Cross-references: GB:M11562; NID:g186587; PIDN:AAA59194.1; PID:g186587; PIDN:g186587; PIDN:g18658
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A;Residues: 20-24 <CALI2>
R;Bourguignon, J.; Diarra-Mehrpour, M.; Sesboue, R.; Frain, M.;
Biochem. Biophys. Res. Commun. 131, 1146-1153, 1985
A;Title: Human inter-alpha-trypsin-inhibitor: characterization
A;Reference number: I52208, MUD:86025577; PMID:2413856
A;Accession: I52208
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A;Title: TSG-6, an arthritis-associated hyaluronan binding A;Reference number: A53642; MUID:94271799; PMID:7516184
A;Accession: A53642
                                                                                                                       A; Note: pooled urine samples contained two forms of this protein, R; Hochatrasser, K.; Schonberger, O.L.; Rossmanith, I.; Wachter, E. Hoppe-Seyler's Z. Physiol. Chem. 362; 1857-1362, 1981
A; Title: Kunitz-type proteinase inhibitors derived by limited prot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Molecule type: protein
A;Residues: 89-100 <AKE>
R;Jessen, T.E.; Faarvang, K.L.; Ploug, M.
FEBS Lett. 230, 195-200, 1988
A;Title: Carbohydrate as covalent crosslink
A;Reference number: S02431; MUID:88167187; F
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A;Residues: 27-35,'Y','37 <WOJ>
R;Atmani, F.; Mizon, J.; Khan, S.R.
Eur. J. Biochem. 236, 984-990, 1996
A;Title: Identification of uronic-acid-rich
A;Reference number: 866434; MUID:96270753; F
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Biochem. J. 311, 753-759, 1995
A;Tille: Factor IX Zutphen: a Cys(18) -> Arg mutation r.
A;Reference number: S59509; MUID:96067589; PMID:7487929
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Eur. J. Biochem. 221, 881-888, 1994
A;Title: Chondroitin sulphate covalently cross-links the
A;Reference number: S43466; MUID:94229087; PMID:7513643
A;Accession: S43466
                                      by affinity chromatography.
A;Reference number: A91698; MUID:82074265; PMID:6171497
                                                                                                                                                                                                                                                                                    A;Molecule type: protein
A;Residues: 206-214, X',216-217 <JES>
R;Residues: 206-214, X',216-217 <JES>
R;Lopez, C.; Grubb, A.; Mendez, E.
FEBS Lett. 144, 349-353, 1982
A;Title: Human protein HC displays variability in its carboxyl-terminal A;Reference number: A91304
A;Contents: annotation; variant of alpha-1-microglobulin
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A; Contents: annotation;
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        carbohydrate
    binding sites
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PMID:2450785
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A; Molecule type: protein
A; Molecule type: protein
A; Molecule type: protein
A; Residues: 212-258, 'Q', 260-269, 'S', 271-277, 'Q', 279-282, 'A', 284, 'IR', 287-292, 'A', 294-310
C; Comment: This inhibitory fragment, released from native ITI after limited proteolysis
first domain interacts weakly with PMN-granulocytic elastase and not at all with pancres
C; Comment: The amino acid at position P2' (228-Met) appears to determine the specificity
nd elastase; those with leucine interact strongly.
C; Superfamily: alpha-1-microglobulin and inter-alpha-trypsin inhibitor light chain precu
C; Keywords: duplication; glycoprotein; plasma; serine proteinase inhibitor
F; 20-173/Domain: lipocalin homology <LIP'
F; 216-266/Domain: animal Kunitz-type proteinase inhibitor homology <BP1'>
F; 216-266/Domain: animal Kunitz-type proteinase inhibitor homology <BP1'>
F; 216-266, 225-249, 241-262, 272-322, 281-305, 297-318/Disulfide bonds: #status predicted
F; 235/Binding site: Carbohydrate (Asn) (covalent) #status experimental
F; 235/Binding site: carbohydrate (Asn) (covalent) #status experimental A;Cross-references: GB:X52087; NID:g1881; PIDN:CAA36306.1; PID:g1882 A;Note: the authors translated the codon GTG for residue 2 as a Met initiation R;Hochstrasser, K.; Wachter, E.; Albrecht, G.J.; Reisinger, P. Biol. Chem. Hoppe-Seyler 366, 473-478, 1985 A;Title: Kunitz-type proteinase inhibitors derived by limited proteolysis of th A;Reference number: A90685; MUID:85225967; PMID:2408637 A;Accession: A01208 alpha-1-microglobulin/inter-alpha-trypsin inhibitor precursor - pig (fragme) R;Alternate names: bikunin; ITI; PI-14 (inhibitory fragment of ITI) C;Species: Sus scrofa domestica (domestic pig) C;Date: 30-Jun-1987 #sequence revision 04-Feb-2000 #text_change 09-Jul-2004 C;Accession: S11066; S13493; A01208 Biochim. Biophys. Acta 1088, 47-56, 1991 A;Title: Molecular cloning of porcine alpha(1)-microglobulin/HI-30 reveals developmenta. A;Reference number: S13493; MUID:91113729; PMID:1703444 R;Gebhard, W.; Schreitmueller, T.; Vetr, H.; Wachter, E.; Hochstrasser, K. FEBS Lett. 269, 32-36, 1990
A;Title: Complementary DNA and deduced amino acid sequences of porcine alpha1-microglobu A;Reference number: S11066; MUID:90353595; PMID:1696914 뭐 S A; Molecule type: mRNA A; Residues: 'M', 3-48, 'M', 50-337 <TAV> C;Comment: Alpha-1-microglobulin and inter-alpha-trypsin inhibitor are proteolytically C;Comment: Alpha-1-microglobulin occurs in many physiological fluids including plasma, . It contains at least one brown-yellow chromophore. A;Molecule type: mRNA A;Residues: 1-337 <GEB> A; Accession: S11066 밁 á A; Note: in vitro, Status: preliminary Accession: S13493 Tavakkol, A Cross-references: UNIPROT:P04366; EMBL:X53685; NID:g1877; PIDN:CAA37725.1; PID:g1878; Status: preliminary Matches Query Match Best Local Local 270 46; 51; 2 ACNLPIVRGACIAFFPRWAFDAVKGKQVLFPYGGGQGNGNKFYSEKBCREYCGVP 56 Similarity Similarity Conservative the first twelve residues of the amino end of the inhibitor appear to ,VRGPCRAFIQLWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 90.0%; 92:7%; 82.7%; 82.1%; ٥, Score 296; DB 1; Pred. No. 3.3e-28; Score 272; DB 1; Pred. No. 2.5e-25; Mismatches Mismatches 6 4; Length 337 Length 352; Indels (fragment) Gaps Gaps of the 0 0 inter-

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A;Molecule type: protein
A;Residues: 206-214,'X',216,'X',218-220 <CAS>
A;Residues: 206-214,'X',216,'X',218-220 <CAS>
C;Superfamily: alpha-1-microglobulin and inter-alpha-trypsin C;Keywords: duplication; glycoprotein; plasma; serine protein C;Keywords: duplication; glycoprotein; plasma; serine protein F;35-188/Domain: lipocalin homology <LIP>
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A;Molecule type: protein
A;Residues: 227-267,'L',269-273,'Q',275-297,'AF',300-329,'Q',331-345,'R',347-348
A;Residues: 227-267,'L',269-273,'Q',275-297,'AF',300-329,'Q',331-345,'R',347-348
R;Hochstrasser, K.; Wachter, B.; Albrecht, G.J.; Reisinger, P.
Biol. Chem. Hoppe-Seyler 366, 473-478, 1985
Biol. Chem. Hoppe-Seyler 366, 473-478, 1985
A;Title: Kunitz-type proteinase inhibitors derived by limited proteolysis of the A;Reference number: A90685; MUID:85225967; PMID:2408637
A;Accession: A90685
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W,Alternate names: BI-14 (inhibitory fragment of ITI); bikunin; ITI
C;Species: Bos primigenius taurus (cattle)
C;Date: 25-Feb-1985 #sequence revision 04-Feb-2000 #text_change 09-Jul-2004
C;Accession: S68149; A91717; A9685; S31219; A01209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Contents: annotation; reactive sites
R;Castillo, G.M.; Templeton, D.M.
FEBS Lett. 318, 292-296, 1993
A;Title: Subunit structure of bovine ESF (extracellular-matrix stabilizing A;Reference number: S31219; MUID:93178646; PMID:7680011
A;Accession: S31219
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A;Title: Bovine alpha(1)-microglobulin/bikunin. Isolation
A;Reference number: S68149; MUID:96201710; PMID:8611630
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A;Title: Kunitz-type proteinase inhibitors derived by limited proteolysis
A;Reference number: A91718; MUID:84133808; PMID:6199276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: protein
A; Residues: 347-349 < HOC2>
R; HOChstrasser, K.; Albrecht,
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Best Local
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Conservative
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78.6%;
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Pred. No. 6e-25;
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C;Date: 30-Jun-1987 #sequence_revision 04-Fe C;Accession: A01210; A45653 R;Hochstrasser, K.; Wachter, E.; Albrecht, 0 Biol. Chem. Hoppe-Seyler 366, 473-478, 1985 A;Title: Kunitz-type proteinase inhibitors

alpha-1-microglobulin/inter-alpha-trypsin inhibitor - horse (fragment) N;Alternate names: EI-14 (inhibitory fragment of ITI); ITI; trypsin in C;Species: Equus caballus (domestic horse)

04-Feb-2000 #text_change tht, G.J.; Reisinger, P.

inhibitor,

derived by limited proteolysis of the

inter-a

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A;Molecule type: mRNA
A;Residues: 1-64,'S',66-349 <ITO>
A;Cross-references: DDBJ:D28812; NID:g556530; PIDN:BAA05973.1; PID:g556531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: UNIPROT:Q07456; EMBL:X68680; NID:g311702; PIDN:CAA48640.1; PID:g3117 R;Itbh, H.; Ide, H.; Kataoka, H.; Tomita, M.; Yoshihara, H.; Nawa, Y. J. Biochem. 116, 767-772, 1994
J. Biochem. 116, 767-772, 1994
A;Title: CDNA sequencing of mouse alphal-microglobulin/inter-alpha-trypsin inhibitor light. A;Reference number: JX0355; MUID:95189774; PMID:7533761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Chan, P.; baller, v....
Biochim. Biophys. Acta 1174, 195-200, 1993
A;Title: Mouse alpha-1-microglobulin/bikunin precursor:
A;Title: Mouse alpha-1-microglobulin/bikunin precursor:
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F;63-113/Domain: animal Kunitz-type proteinase inhibitor homology <BP2>
F;7-57,16-40,32-53,63-113,72-96,88-109/Disulfide bonds: #status predicted F;17/Inhibitory site: Leu (chymotrypsin, elastase) #status predicted F;26/Binding site: carbohydrate (Asn) (covalent) #status experimental F;73/Inhibitory site: Arg (trypsin) #status predicted
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C; Comment: This inhibitory fragment, released from native ITI after limited proteolysis
first domain interacts weakly with PMN-granulocytic elastase and not at all with pancrea
C; Comment: The amino acid at position P2' (19-Met) appears to determine the specificity
d elastase; those with leucine interact strongly.
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                                                                                                                                                                                                                       A;Experimental source: liver C;Superfamily: alpha-1-microglobulin and inter-alpha-trypsin inhibitor light C;Superfamily: alpha-1 inflammation; serine proteinase inhibitor C;Keywords: 9lycoprotein; inflammation; serine proteinase inhibitor F;34-187/Domain: lipocalin homology <LIP>
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N;Alternate names: alpha 1-microglobulin / inter-alpha-trypsin inhibitor light
C;Species: Mus musculus (house mouse)
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A;Residues: 1-12,'E',14-33 <VEE>
A;Cross-references: PIDN:AAB22430.1; PID:g250858
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A;Accession: A45653
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   Best Loc
Matches
                                                                                                                          ;230-280/Domain: animal Kunitz-type proteinase inhibitor homology <BP1>;230-280/Domain: animal Kunitz-type proteinase inhibitor homology <BP2>;114,233/Binding site: carbohydrate (Asn) (covalent) #status predicted
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                                                                  Query Match
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Score 261; DB Pred. No. 5.6e 5; Mismatches
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                                                                  DB 2;
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C;Date: 22-Nov-1993 #sequence revision 01-Sep-1995 #text_change 09-Jul-2004 C;Accession: S21089; A53056; A25935; A31890; A61633 R;Lindqvist, A.; Bratt, T.; Altieri, M.; Kastern, W.; Akerstroem, B. Biochim. Biophys. Acta 1130, 63-67, 1992 A;Title: Rat alpha(1)-microglobulin: co-expression in liver with the light chain of A;Reference number: S21089; MUID:92182014; PMID:1371936
                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Molecule type: protein
A;Residues: 283-301, 'L',303-322,'N',324-329,'PK',332-333,'W',335-343
R;Sugiki, M.; Maruyama, M.; Yoshida, E.; Sumi, H.; Mihara, H.
Inflammation 15, 281-289, 1991
A;Title: Acid-stable protease inhibitor in chronic phase of carrageen
A;Reference number: A61633; MUID:92120777; PMID:1769732
A;Accession: A61633
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A; Residues: 141, 'A', 143-195 < KAS>
R; Kido, H, Yokogoshi, Y.; Katunuma, N.
J. Biol. Chem. 263, 18104-18107, 1988
A; Title: Kunitz-type protease inhibitor found in rat mast cells. Purification,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Molecule type: DNA
A;Residues: 285-341 <ITO>
A;Residues: 285-341 <ITO>
B;Rastern, W: Bjorck, L.; Akerstrom, B.
J. Biol. Chem. 261, 15070-15074, 1986
J. Title: Developmental and tissue-specific A;Reference number: A25935; MUID:87033744; A;Accession: A25935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           alpha-1-microglobulin/inter-alpha-trypsin
N;Alternate names: acid-stable proteinase
C;Species: Rattus norvegicus (Norway rat)
C;Date: 22-Nov-1993 #sequence_revision_01-
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A; Residues: 205-213, 'X', 215-229, 'N', 231-232, 'K', 234-238 <SUG>
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A; Residues: 1-349 <LIN>
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Matches
                                           Query Match
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  43;
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                        78.4%;
78:2%;
Score 258; DB 2; I
Pred. No. 1.3e-23;
5; Mismatches 7;
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                                           Length 349;
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ACNLPIVOGPCRAFAELWAFDAAOGKCIOFIYGGCKGNGNKFYSEKECKEYCGVP 339 ACNIPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56

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R;Slunt, H.H.; Thinakaran, G.; Von Koch, C.; Lo, A.C.; Tanzi, R.I. J. Biol. Chem. 269, 2637-2644, 1994
A;Title: Expression of a ubiquitous, cross-reactive homologue of A;Reference number: A49974; MUID:94132029; PMID:8300594
A;Accession: A49974
                                                                                                                                                                                                                                                                                               beta-amyloid precursor protein 2 homolog APLP2 - mouse
C;Species: Mus musculus (house mouse)
C;Date: 06-Oct-1994 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004
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A;Residues: 1-111 <PET>
A;Cross-references: UNIPROT:Q7M4L3
F;59-109/Domain: animal Kunitz-type proteinase inhibitor homology <BPI>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Title: Expression, purification and characterization of a Kunitz-type protease inhibit A;Reference number: S41082; MUID:94139895; PMID:8307156 A;Accession: S41082
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C;Superfamily: alpha-1-microglobulin and inter-alpha-trypsin inhibitor light
C;Keywords: serine proteinase inhibitor
F;5-55/Domain: animal Kunitz-type proteinase inhibitor homology <BP1>
F;61-111/Domain: animal Kunitz-type proteinase inhibitor homology <BP2>
A;Cross-references: UNIPROT:Q60709; GB:U15571; NID:g558467; PIDN:AAA50603.1; PID:g558461
A;Note: sequence extracted from NCBI backbone (NCBIP:144636)
C;Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase:
                                                                                               A;Status: preliminary; not compared with A;Molecule type: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R; Petersen, L.C.; Bjorn, S.I
FEBS Lett. 338, 53-57, 1994
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A;Accession: A29652
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C; Species: Ovis orientalis aries,
                                                                                                                                                                                                                                                                               C; Accession: A49974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C;Species: Homo sapiens (man)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amyloid precursor protein homolog - human (fragment)
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C;Species: Ovis orientalis aries, Ovis ammo
                                                                            A;Residues: 1-751 <SLU>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CSQEAMTGPCRAVMERWYFDLSKGKCVRFIYGGCGGNRNNFESEDYCMAVC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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Pred. No. 1.3e-11;
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Pred. No. 6.6e-24;
5; Mismatches 8
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RESULT 10
A49321
amyloid precursor-like protein - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C;Accession: S42880; S47528
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C;Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type
C;Keywords: alternative splicing; transmembrane protein
F;310-360/Domain: animal Kunitz-type proteinase inhibitor homology <BPI>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Cross-references: EMBL:Z22572; NID:g394763; PIDN:CAA80295.1; PID:g394764 R;Wasco, W.; Gurubhagavatula, S.; Paradis, M.; Romano, D.M.; Sisodia, S.S.; Nature Genet. 5, 95-99, 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Note: sequence extracted from NCBI backbone (NCBIN:131198, NCBIP:131199) A;Note: expression was shown in placenta, brain, heart, lung, liver, and A R;von der Kammer, H.; Klaudiny, J.; Hanes, J.; Scheit, K.H. submitted to the EMBL Data Library, April 1993 A;Description: The human homologue of the murine CDEI binding protein is a A;Description:
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N;Alternate names: CDBI-binding protein
C;Species: Homo sapiens (man)
C;Date: 24-Feb-1994 #sequence revision 18-Nov-1994 #text_change 09-Jul-2004
C;Accession: A49321; S34644; S40519
R;Sprecher, C.A.; Grant, F.J.; Grimm, G.; O'Hara, P.J.; Norris, F.; Norris,
Biochemistry 32, 4481-4486, 1993
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                                                                                                                        S42880
                                                                                                                                               RESULT 11
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A;Residues: 1-763 <WAS>
A;Cross-references: GB:L27631; NID:g450391; PIDN:AAC41701.1;
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A; Residues: 1-763 < VON>
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A; Residues: 1-763 <SPR>
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A; Accession: A49321
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Best Local :
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54.9%;
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Pred. No. 7.4e-11;
2; Mismatches 21
                                                                                                                                                                                                                                                                                                                                                                   Score 155; DB 2;
Pred. No. 7.5e-11;
                                                                                                                                                                                                                                                                                                                                         Mismatches
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R;Sandbrink, R.; Masters, C.L.; Beyreuther, K. submitted to the EMBL Data Library, March 1994 A;Description: Complete nucloetide ad deduced

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acid sequence of rat amyloid precurs

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RESULT 12
JG0185
                                      A;Cross-references: UNIPROT:P36992; EMBL:X63762; NID:g64233; PIDN:CAA45294.1; C;Superfamily: alpha-1-microglobulin and inter-alpha-trypsin inhibitor light (C;Superfamily: alpha-1-microglobulin and inter-alpha-trypsin inhibitor light (F;37-189/Domain: lipocalin homology <IP>F;37-189/Domain: animal Kunitz-type proteinase inhibitor homology <BP1>F;292-342/Domain: animal Kunitz-type proteinase inhibitor homology <BP2>
                                                                                                                                                                                                                                                                                                                                                                  gamma-1-microglobulin precursor - plaice
C;Species: Pleuronectes platessa (plaice)
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004
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A;Cross-references: UNIPROT:P15943; EMBL:X77934
A;Cross-references: UNIPROT:P15943; EMBL:X77934
R;Sandbrink, R.; Masters, C.L.; Beyreuther, K.
Biochim. Biophys. Acta 1219, 167-170, 1994
A;Title: Complete nucleotide and deduced amino acid sequence
A;Reference number: S47528; MUID:94368849; PMID:8086458
A;Accession: S47528
                                                                                                                                                                                                                                             submitted to the EMBL Data Library, A;Reference number: $22181 A;Accession: $22181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R;Itoh, H.; Kataoka, H.; Hamasuna, R.; Kitamura, N.; Koono, M.
Biochem. Biophys. Res. Commun. 255, 740-748, 1999
A;Tille: Hepatocyte growth factor activator inhibitor type 2 lacking the first kunitz-ty
A;Reference number: JG0185; MUID:99160423; PMID:10049781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C;Species: Mus musculus (house mouse)
C;Date: 23-Jul-1999 #sequence_revision 23-Jul-1999 #text_change 15-Mar-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Keywords: alternative вратскиј
F;312-362/Domain: animal Kunitz-type proteinase inhibitor homology
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C;Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type
C;Keywords: alternative splicing
                                                                                                                                                                     A; Residues: 1-355 < LEA>
                                                                                                                                                                                          A; Molecule type: mRNA
                                                                                                                                                                                                                        A;Status:
                                                                                                                                                                                                                                                                                                                                              C; Accession: S22181
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A; Residues: 1-765 <SA2>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cross-references: GB:AF099016
:133-183/Domain: animal Kunitz-type proteinase inhibitor homology
Query Match
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54.98;
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Pred. No. 7.6e-11;
Score 152;
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Pred. No. 3.6e-11;
                                                                                                                                                                                                                                                                                                December 1991
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A,Molecule type: mRNA
A,Residues: 1-76 <FUKA
A,Residues: 1-76 <FUKA
A,Residues: 1-76 <FUKA
A,Cross-references: UNIPROT:P12023; EMBL:X15210; NID:g49965; PIDN:CAA33280.1; PID:g93013
A,Cross-references: UNIPROT:P12023; EMBL:X15210; NID:g49965; PIDN:CAA33280.1; PID:g93013
A,Note: the authors translated the codon GAT for residue 74 as Val
C,Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase 1
C,Keywords: alternative splicing; serine proteinase inhibitor; transmembrane protein
C,Keywords: alternative splicing; serine proteinase inhibitor homology <BPI>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alzheimer's disease amyloid A4 protein - mouse (fragment) C;Species: Mus musculus domesticus (western European house mouse) C;Date: 28-Feb-1990 #sequence_revision 28-Feb-1990 #text_change CC;Date: 28-Feb-1990 #sequence_revision 28-Feb-1990 #text_change CC;Date: 28-Feb-1990 #tex
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A;Residues: 1-38,'R',40,'B',42,'BB',45-48,'ZZ',51,'Z',53-62 <KRE>
C;Superfamily: basic proteinase inhibitor; animal Kunitz-type proteinase
C;Keywords: serine proteinase inhibitor
F;5-55/Domain: animal Kunitz-type proteinase inhibitor homology <BPI>
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A;Notes: 13-Arg, 16-Gly, 17-Gly, 25-Leu, 28-Arg, and 39-Arg were also for R;Krobs, H.C.; Haberman, G.G.
Naturwissenschaften 74, 395-396, 1987
A;Title: Isolierung und strukturaufklaerung eines haemolytisch aktiven A;Reference number: A94700
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A;Title: Sequence of the protease inhibitor domain of the A4 amyloid A;Reference number: S04855; MUID:89345111; PMID:2569710
A;Accession: S04855
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Matches 27; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 K.I.; Martin, G.M.;
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                                                                                                                                                             27;
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EVCSEQAETGPCRAMISRWYFDVTEGKCVPFFYGGCGGNRNNFDTEEYCMAVCG
                                                                        EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGV
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                                                                                                                                                         Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              45.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         50.9%;
                                                                                                                                                                                                   45.6%;
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5; Mismatches 21
                                                                                                                                                                                                   Score 150; DB 2;
Pred. No. 3.7e-11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 151; DB 2; Length 62; Pred. No. 2.3e-11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S.S
                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
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                                                                                                                                                                                                                                     Length 76
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RESULT 16 A32282

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Alzheimer's (C;Species: MC;Date: 17-A)
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                                                                                                                                                                                                                                                                      C;Accession: S06678
R;Koo, E.H.; Sisodia, S.S.; Price, D.L.
submitted to the EMBL Data Library, July 1989
                                                                                                                                                                                                                                                                                                                                          Alzheimer's disease amyloid beta protein - rhesus macaque (fragment) C;Species: Macaca mulatta (rhesus macaque) C;Date: 28-Feb-1990 #sequence_revision 28-Feb-1990 #text_change 09-0
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F;11-61/Domain: animal Kunitz-type proteinase inhibitor homology <BPl>
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                                                                                      A;Cross-references: UNIPROT:P29216; EMBL:X15985; NID:g38080; PIDN:CAA34116.1; PID:g9301 C;Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase C;Keywords: alternative splicing; serine proteinase inhibitor C;Keywords: alternative splicing; serine proteinase inhibitor homology <BPI> F;3-53/Domain: animal Kunitz-type proteinase inhibitor homology <BPI>
                                                                                                                                                                                    A; Molecule type: mRNA
A; Residues: 1-76 < KOO>
                                                                                                                                                                                                                                A; Reference number: S06678
A; Accession: S06678
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A; Residues: 1-64 < NOR>
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A; Accession: S41399
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change
C;Accession: S41399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C; Keywords: alternative splicing F;11-61/Domain: animal Kunitz-ty
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Cross-references: UNIPROT:P12023; GB:M24397; NID:g200350; PIDN:AAA39929.1; PID:g200351
C;Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Status: preliminary
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: mRNA
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Query Match
Best Local S
Matches 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Species: Homo sapiens (man)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;11-61/Domain: animal Kunitz-type proteinase inhibitor homology
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Date: 17-Aug-1989 #sequence_revision 17-Aug-1989 #text_change 09-Jul-2004
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                          Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYC 53
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A putative gene for a novel human
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    Conservative
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43.1%;
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                     44.48;
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Pred. No. 5.6e
10; Mismatches
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    4.
                        Score 146; DB 2
Pred. No. 1.1e-1
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Pred. No. 4.8e-11;
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    Mismatches
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5.6e-11;
                                             DB 2;
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                                           Length 76;
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  Gaps
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Alzheimer's disease amyloid beta protein precursor [validated] - human N,Alternate names; Alzheimer's disease amyloid A4 protein; coagulation factor XIa inhibi N,Contains; amyloid beta protein long, plaque form; amyloid beta protein short, vascular protein precursor splice form APP(770) C,Species: Homo sapiens (man) C,Date: 30-Jun-1987 #sequence revision 28-Jul-1995 #text_change 15-Sep-2000 C,Date: 30-Jun-1987 #sequence revision 28-Jul-1995 #text_change 15-Sep-2000 C,Accession: S02260; S05194; A32277; A33260; A35486; I39451; I39451; I39453; I59562; A44 4668; A28833; A29302; A60805; JU0038; S06121; A60355; A59011; A38384; S29076; S38252; S3 R,Lemaire, H.G.; Salbaum, J.M.; Multhaup, G.; Kang, J.; Bayney, R.M.; Unterbeck, A.; Bey Nucleic Acids Res. 17, 517-522, 1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 09-Jul-2004 C;Accession: S03607 R;Kang, J.; Mueller-Hill, B. Nucleic Acids Res. 17, 2130, 1989 Nucleic Acids Res. 17, 2130, 1989 A;Title: The sequence of the two extra exons in rat preA4. A;Reference number: S03607; MUID:89183625; PMID:2648331 A;Accession: S03607.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Title: A novel mRNA of the A4 amyloid precursor gene A;Reference number: A32761; MUID:89346754; PMID:2569763 A;Accession: A32761
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C;Date: 29-Jan-1990 #sequence_revision 10-Apr-1996
C;Accession: A32761
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C; Keywords: cloning artifact
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A;Note: the authors translated the codon ATG for residue 433 as Leu
C;Comment: This is the hypothetical translation of a sequence believed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: mRNA
A; Residues: 1-484 < DES>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R; de Sauvage, F.; Octave,
Science 245, 651-653, 198
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A; Residues: 1-76 < KAN>
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48.1%;
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Pred. No. 6.1e-10;
4; Mismatches 24
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Pred. No. 1.1e-10;
4; Mismatches 24
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A;Title:

precursor protein of Alzheimer's disease A4 amyloid is encoded b

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A;Molecule type: DNA
A;Residues: 1-530, 'QMLDFVIPAFWEAKVGR' <YOS2>
A;Cross-references: GB:M34875; NID:g178608; PIDN:AAB59501.1; PID:g178615
R;YOShikai, S.I.; Sasaki, H.; Doh-ura, K.; Furuya, H.; Sakaki, Y.
Gene 102, 291-292, 1991
                                                                                                                                                                                                                                                                                                             R;Levy, E.; Carman, M.D.; Fernandez-Madrid, I
Science 248, 1124-1126, 1990
A;Tille: Mutation of the Alzheimer's disease
A;Reference number: 139453; MUID:90260663; PM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Title: Genomic organization of the human amyloid beta-protein precursor A;Reference number: I39451; MUID:90236318; PMID:2110105 A;Accession: I39452
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A;Molecule type: DNA
A;Residues: 672-710 <PRE1>
A;Residues: 630-Gln was found in DNA isolated from HCHWA-D patients
R;Yoshikai, S.I.; Sasaki, H.; Doh-ura, K.; Furuya, H.; Sakaki, Y.
Gene 87, 257-263, 1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Cross-references: GB:M24546; GB:M24547; NID:g341202; PIDN:AAC13654.1; PID:g516074 R;Johnstone, E.M.; Chaney, M.O.; Moore, R.E.; Ward, K.E.; Norris, F.H.; Little, S.P. Biochem. Biophys. Res. Commun. 163, 1248-1255, 1989 A;Title: Alzheimer's disease amyloid peptide is encoded by two exons and shows simil A;Reference number: A33260; MUID:89392030; PMID:2675837
                                                                                                                            A;Note: a mutation with 693-Gln is R;Murrell, J.; Farlow, M.; Ghetti,
                                                                                                                                                                                                                                                                                                                                                                         A;Retremeration; erratum
A;Contents: annotation; erratum
A;Note: revised physical map for reference I39451
n.tanv R.: Carman, M.D.; Fernandez-Madrid, I.J.; Power,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Note: alternative splice form APP(695)
R;La Fauci, G.; Lahiri, D.K.; Salton, S.
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                                                                         A; Title: A mutation in the amyloid precursor protein associated
                                                                                                 Science 254, 97-99, 1991
                                                                                                                                                                                A;Residues: 656-737 <LEV>
A;Cross-references: GB:M37896; NID:g178618; PIDN:AAA51727.1;
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\;Residues: 656-737 <JOH>
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;Residues: 1-75 <LAF>
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nem. Biophys. Res. Commun.
translated from GB/EMBL/DDBJ
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                                                   I59562; MUID:92022553;
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PMID:2111584
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                                                                                                                            A; Reference number: S00707;
A; Accession: S00707
                                                                                                                                                                             R;Tanzi, R.E.; McClatchey, F
Nature 331, 528-530, 1988
A;Title: Protease inhibitor
                                                                                                                                                                                                                                                               A; Molecule type: mRNA
A; Residues: 672-678 < DYR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Experimental source: brain
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A; Residues: 1-288, 'V'
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A; Residues: 687-718 < KAM2 >
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A;Accession: mRNA
A;Rolecule type: mRNA
A;Rolecule type: mRNA
A;Rolecule type: mRNA
A;Rosidues: 284-288,'V', 365-646,'E',648-770 <ROB>
A;Rosidues: 284-288,'V', 365-646,'E',648-770 <ROB>
A;Rosidues: 284-288,'V', 365-646,'E',648-770 <ROB>
A;Rolecules: 284-288,'V', 365-646, 'E',648-770 <ROB>
A;Rolecules: 284-288,'V', 365-646, 'E',648-770 <ROB>
A;Rolecules: 284-288,'V', 365-646,'E',648-770 <ROB>
A;Rolecules: 284-288,'V', 365-646,'E',6
A;Accession: ...
A;Molecule type: mRNA
A;Rolecule type: mRNA
A;Residues: 286-344,'I',365-366 <TAN2>
A;Cross-references: EMBL:X06982; NID:928817; PIDN:CAA30042.1;
A;Cross-references: EMBL:X06982; NID:92882; PIDN:CAA30042.1;
A;Cross-references: EMBL:X06982; PIDN:CAA3004
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A; Cross-references: GB:M15532; NID:g177957; PIDN:AAA51564.1;
A; Cross-references: GB:M1564; NID:g177957; NID:g177957; NID:g177957; NID:g177957; NID:g177957; NID:g177957; NID:g177957; NID:g177957; NID
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A;Title: Amyloid beta protein gene: cDNA, mRNA distribution, A;Reference number: A47585; MUID:87120329; PMID:2949367
A;Accession: A47585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R;Kamino, K.; Orr, H.T.; Payamı, H.; Payama, V.; Kukull, W.; Larson, B.; Heston, L.L.; Martin, arakis, S.B.; Korenberg, J.R.; Sharma, V.; Kukull, W.; Larson, B.; Heston, L.L.; Martin, Am. J. Hum. Genet. 51, 998-1014, 1992
Am. J. Hum. Genet. 51, 998-1014, 1992
A;Title: Linkage and mutational analysis of familial Alzheimer disease kindreds for the A;Title: Linkage and mutational analysis of familial Alzheimer disease kindreds for the
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A;Title: Identification, transmembrane orientation and biogenesis of A;Reference number: 802638; MUID:88296437; PMID:2900137
A;Accession: S02638
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A;Residues: 674-756,'S',758-770 <GOL>
A;Cross-references: GB:M15533; NID:g178706; PIDN:AAA35540.1; PID:g178707
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Proc. Natl. Acad. Sci. U.S.A. 84, 4190-4194, 1987
A;Title: Molecular cloning and characterization of a cDNA
A;Reference number: A29030; MUID:87231971; PMID:3035574
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A;Title: The precursor of Alzheimer's disease amyloid A4
A;Reference number: A03134; MUID:87144572; PMID:2881207
A;Accession: A03134
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A;Cross-references: GB:S45135; NID:g257377; PIDN:AAB23645.1;
A;Experimental source: familial Alzheimer disease family SB
A;Note: sequence extracted from NCBI backbone (NCBIP:115374)
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A;Note: alternative splice form APP(695)
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A;Note: this sequence has a silent mutation
R;Kang, J.; Lemaire, H.G.; Unterbeck, A.; Salbaum, J.M.; Masters,
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                              A;Reference number: A44017; MUID:93035397; A;Accession: A44017
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R;Kamino, K.; Orr, H.T.; Payami, H.; Wijsman, E.M.; Alonso, M.E.; Pulst, S.M.;
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MUID:88122640;
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Lemaire, H.G.;
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Gajdusek, D.C.
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C;Accession: T26063
R;Cummings, P.
submitted to the EMBL Data Library, March 1997
A;Reference number: Z20145
A;Accession: T26063
                                                                                                                                                                                                                                                    hypothetical protein W01F3.3 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T26063
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A;Residues: 507-770 <ZAI>
A;Residues: 507-770 <ZAI>
A;Residues: 507-770 <ZAI>
A;Cross-references: GB:M18734; NID:g178572; PIDN:AAA51726.1; PID:g178573
A;Cross-references: GB:M18734; NID:g178572; PIDN:AAA51726.1; PID:g178573
A;Note: the authors translated the codon GAA for residue 599 as Gly, ACC for residue 6
B as Val, GTG for residue 609 as Asn, AAT for residue 610 as Gly, and GGT for residue
A;Note: the cited Genbank accession number, J03594, is not in release 101.0
R;Masters, C.L.; Multhaup, G.; Simms, G.; Pottgiesser, J.; Martins, R.N.; Beyreuther,
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R; Zain, S.B.; Salim, M.; Chou, W.G.; Sajdel Proc. Natl. Acad. Sci. U.S.A. 85, 929-933, A; Title: Molecular cloning of amyloid cDNA A; Reference number: A31087; MUID:88124954; A; Accession: A31087
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A;Residues: 1-344,'I',365-770 <PO2>
A;Cross-references: GB:X06989; EMBL:Y00297; NID:g28720; PIDN:CAA30050.1;
A;Note: alternative splice form APP(751)
R;Kitaguchi, N.; Takahashi, Y.; Tokushima, Y.; Shiojiri, S.; Ito, H.
Nature 331, 530-532, 1988
A;Residues: 1-2225 <WIL>
A;Cross-references: UNIPROT:O45881;
A;Experimental source: clone W01F3
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A;Experimental source: glioblastoma cell line
A;Note: alternative splice form APP(770)
R;Votek, M.P.; Rasool, C.G.; de Sauvage, F.; Vitek, S.M.; Bartus, R.T.; Beer, Brain Res. Mol. Brain Res. 4, 121-131, 1988
A;Title: Absence of mutation in the beta-amyloid cDNAs cloned from the brains
                                                                               A; Molecule type: DNA
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A;Accession: B30320
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                                                                                                          A;Status: preliminary; translated
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A;Residues: 122-288,'V',365-770 <VIT2>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: mRNA
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A;Residues: 287-367 <KIT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Accession: C30320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Reference number: A30320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Status: not compared with conceptual translation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Accession: A38949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A new A4 amyloid mRNA contains a domain homologous nce number: S00925; MUID:88122639; PMID:2893289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 P.; Gonzalez-DeWhitt, P.; Schilling, J.; Miller,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         not compared with conceptual
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EVCSEQAETGPCRAMISRWYFDVTEGKCAPFFYGGCGGNRNNFDTEEYCMAVCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         44.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            W.G.; Sajdel-Sulkowska, E.M.; Majocha, R.E.; Marotta,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 146; DB :
Pred. No. 9.3e-
                                                                                                             from
                          EMBL: Z92815; PIDN: CAB07294.1; GSPDB: GN00023; CESP: WQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                             GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            derived from mRNA PMID:2893379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 770;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
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RESULT 23
T23573
                                                                                                                                                     A;Cross-references: UNIPROT:P31713
C;Superfamily: basic proteinase inhibitor; animal Kunitz-type proteinase inhibitor F;3-53/Domain: animal Kunitz-type proteinase inhibitor homology <BP1>
                                                                                                                                                                                                                                                                                  Eur. J. Blochem. 212, 675-684, 1993
A;Title: The MMR solution structure of a Kunitz-type proteinase inhibitor
A;Reference number: $30332; MUID:93215644; PMID:8462542
A;Accession: $30332
                                                                                                                                                                                                                                                                                                                                                                                                         proteinase inhibitor (Kunitz-type) - sea anemone (Stichodactyla helianthus)
C;Species: Stichodactyla helianthus, Stoichactis helianthus (Caribbean sea
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 09-Jul-2004
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                                                                                                                                                                                                                                                                                                                                                                    C;Accession: S30332
R;Antuch, W.; Berndt, K.D.; Chavez, M.A.; Delfin, J.; Wuethrich,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              830332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Gene: CESP: K10D3.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: UNIPROT:Q21418; EMBL:Z75545; PIDN:CAA99886.1; GSPDB:GN00019; CESP:K1
A;Experimental source: clone K10D3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   submitted to the EMBL Data Library, June A;Reference number: Z19762 A;Accession: T23573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R; McMurray, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C; Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hypothetical protein K10D3.4 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct_1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
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A; Introns: 33/1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Gene: CESP: W01F3.3
                                                                                                                                                                                                                                                                 A;Status: preliminary
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Residues: 1-922 <WIL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Status: preliminary; translated from GB/EMBL/DDBJ
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Best Local
                                                                             Matches
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                                    3 CNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYC 53
                                                                             l Similarity
25; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 CNIPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYC
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l Similarity 49.0%;
25; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          h 44.4%;
Similarity 47.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CKLPREQGNCGTYSNRWWFNAKTGNCEEFIYSGCQGNANNFETYKECQDYC 461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EKCLOPVEPGPCKNFADRWYFNVDDGTCHPFKYGGCAGNRNHFFTQKECEVHC
CSEPKKVGRCKGYFPRFYFDSETGKCTPFIYGGCGGNGNNFETLHQCRAIC 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             278/1; 355/1; 743/1; 802/1;
                                                                                               49.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 144; DB Pred. No. 1.9e-6; Mismatches
                                                                             6,
                                                                                            Score 140; DB 2;
Pred. No. 4.5e-10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 146; DB 2;
Pred. No. 2.5e-09;
                                                                         Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  885/2
                                                                                                                Length 55;
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venom basic proteinase N;Alternate names: veno

nase inhibitor venom trypsin

I - western inhibitor I

sand

RESULT 25

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G;Species: Vipera ammodytes ammodytes (western sand viper)
G;Date: 19-Peb-1994 #sequence_revision 19-Peb-1994 #text_change 09-Jul-2004
G;Accession: A01222
R;Riconja, A.; Meloun, B.; Gubensek, F.
Biochim. Biophys. Acta 748, 429-435, 1983
A;Title: The primary structure of Vipera ammodytes venom trypsin inhibitor I.
A;Reference number: A01222; MUID:84053385; PMID:6639951
A;Accession: A01222
A;Accession: A0
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Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                -MODEL=frame+ p2n.model -DEV=xlh
-Q=/cgn2 1/USPTO_spool/US10038722/runat_18022005_145335_14309/app_query.fasta_1.199
-Q=/cgn2 1/USPTO_spool/US10038722/runat_18022005_145335_14309/app_query.fasta_1.199
-DB=N Geneseq_16Deco4 -QFMT=fastap -SUFFIX=rng -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bite -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=25
-MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=200000000
-USER=US10038722 @CDL 1 644 @runat 18022005_145235_14309 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOXE=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPOEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       on:
                                                                                                                                           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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1: geneseqn1980s:*
2: geneseqn1900s:*
3: geneseqn2000s:*
4: geneseqn2001bs:*
5: geneseqn2001bs:*
6: geneseqn2002as:*
7: geneseqn2003as:*
9: geneseqn2003as:*
9: geneseqn2003as:*
11: geneseqn2003as:*
11: geneseqn2003as:*
11: geneseqn2004as:
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Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
  100.0
                                                                               Match
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 ADF42040
ADR90032
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Adf42040 Albumin f
Adr90032 C-termina
Adf42039 Albumin f
Adr90031 N-termina
Adf42055 DX-890 DN
                                                                              Description
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ADF42040
    ADF42040 standard; cDNA; 190
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Aan81432 Sequence	5565	5155 Metasta	L54 Metastas)87 Insert	1 88	086 Insert	046 rUTI cD	83 Ep1-C	498 Huma	12 Hind	L Ep7-	0 Ep1-	8 Full	Enco) Factor X	ā	; Factor X	51		58 Prot	07 DNA	45 UTI c	t79078 Anti-try	35168 Plasn	66 P	9	42068	056 Plasmid	90048	90045	£42053	0033 N-t	0035 C-t	2041	f42043 C-termin	£0456	Aat35167 EPI-HNE-4	f04571 Fusion	Adr90047 DX-890 co

ALIGNMENTS

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ID ADF42040 standard; cDNA; 190 BP.

XX AC ADF42040;

XX 12-FEB-2004 (first entry)

XX 12-FEB-2004 (first entry)

XX Albumin fusion protein-related C-terminal BamHI-HindIII DX-890 cDNA

XX Albumin fusion; Kunitz domain; cytostatic; haemostatic;

XX Malbumin fusion; kunitz domain; cytostatic; haemostatic; haemostatic;

XX Malbumin fusion; kunitz domain; cytostatic; haemostatic; haemostatic
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Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a novel albumin fusion protein comprising a Kunitz domain peptide or its fragment or variant and an albumin or its fragment or variant. The fusion protein of the invention demonstrates cytostatic and haemostatic activities and may be useful for preparing a composition for treating a patient with hereditary angioedema, an angioedema-related disease, cancer, a cancer-related disease or a bleeding disorder, as well as during gene therapy procedures. The current sequence is that of the albumin fusion protein-related C-terminal BamHI-HindIII DX-890 cDNA of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Albumin fusion protein comprising a Kunitz domain peptide and an albumin, useful for preparing a composition for treating a patient with hereditary angioedema or angioedema-related disease, cancer or bleeding disorder.
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                                                                                                                                                                                                         Kunitz domain peptide; cystic fibrosis; cystic fibrosis related disease; hereditary angioedema; cancer; chronic obstructive pulmonary disease; asthma; bronchitis; acute respiratory syndrome; pneumonia; bleeding;
                                                                                                                                                                                                                                                              C-terminal BamHI-HindIII DX-890
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(LEYA/)
                                                                  07-FEB-2003; 2003US-00361997
                                                                                                                                                                                              cytostatic; haemostatic;
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                         LADNER R C.
LEY A C.
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  Ley AC
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RESULT 3
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Best Local Similari
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                       Hauser H,
Ley AC;
                                                                                                                                                                                                                                                                                                                                                                                                                                       albumin fusion; Kunitz hereditary angioedema;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 190 BP;
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                                                                                             (AVET )
(AVET )
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                                                                                                                                                                                                             07-FEB-2002; 2002US-0355547P
                                                                                                                                                                                                                                                           07-FEB-2003;
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                                                                                                                     AVENTIS BEHRING GMBH
AVENTIS BEHRING LLC.
DELTA BIOTECHNOLOGY
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bleeding; gene therapy;
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RESULT 4
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XX ADR9603
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kunitz domain peptide; cystic fibrosis; cystic fibrosis related disease; hereditary angioedema; cancer; chronic obstructive pulmonary disease; asthma; bronchitis; acute respiratory syndrome; pneumonia; bleeding; cytostatic; haemostatic; DX-890; ss.
  WPI; 2004-625120/60
                                                       Ladner RC,
                                                                                                                                                                                      07-FEB-2003; 2003US-00361997
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                                                                                                      LADNER R C.
LEY A C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GluAlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAla
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                                                    Ley AC;
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                                         Hauser H,
Ley AC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to proteins comprising kunitz domain peptide, designated DPI-14 for inhibiting human neutrophil elastase, fused to albumin. The invention is useful for treating cystic fibrosis and related diseases, hereditary angioedema, cancer and related diseases including chronic obstructive pulmonary disease, asthma, bronchitis, acute respiratory syndrome, pneumonia and bleedding. The invention acts as a cytostatic and haemostatic agent. The present sequence is a N-terminal EgIII-BamHI DX-890 cDNA. This sequence is used in the exemplification of
                                                                                                                 (AVET )
(AVET )
(DELZ )
(DYAX-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                               albumin fusion; Kunitz domain; cycostatic; haemostatic; hereditary angioedema; cancer; bleeding; gene therapy; plasmid pDB2300X2 NotI expression cassette; ds; DX-890.
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the treatment
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                                                                                                               AVENTIS BEHRING GMBH.
AVENTIS BEHRING LLC.
DELTA BIOTECHNOLOGY LOYAX CORP.
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                                                                      Ladner
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a novel albumin fusion protein comprising a Kunitz domain peptide or its fragment or variant and an albumin or its fragment or variant. The fusion protein of the invention demonstrates cytostatic and haemostatic activities and may be useful for preparing a composition for treating a patient with hereditary angioedema, an angioedema-related disease, cancer, a cancer-related disease or a bleeding disorder, as well as during gene therapy procedures. The current sequence is that of the DX-890 DNA of the invention which was inserted aspEPI/KpnI site of plasmid pDB2300X2 modified NotI expression cassette.
                                                                                                                                    07-FEB-2003; 2003US-00361997
                                                                                                                                                                                                                                          hereditary angioedema; cancer; chronic obstructive pulmonary asthma; bronchitis; acute respiratory syndrome; pneumonia; bccytostatic; haemostatic; DX-890; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Albumin fusion protein comprising a Kunitz domain peptide and an albumin, useful for preparing a composition for treating a patient with hereditary angioedema or angioedema-related disease, cancer or bleeding disorder.
                                                                                                          07-FEB-2003; 2003US-00361997
                                                                                                                                                                                         US2004171794-A1.
                                                                                                                                                                                                                    Unidentified
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                                         Ladner RC,
                                                                                                                                                                                                                                                                                   Kunitz domain peptide; cystic fibrosis;
                2004-625120/60
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                                                                   LADNER R C.
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                                                                                                                                                                                                                                                                                   cystic fibrosis related disease;
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bleeding;
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New fused gene constructs and expression vectors, useful for transforming microorganisms (particularly the yeast Pichia pastoris) for use in producing e.g. EPI-hNE-4 proteins with very low levels of its improperly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         chronic obstructive pulmonary disease, asthma, bronchitis, acute respiratory syndrome, pneumonia and bleeding. The invention acts as a cytostatic and haemostatic agent. The present sequence is a DX-890 coding region cDNA. This sequence is used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           albumin. The invention is useful for treating cystic fibrosis and related diseases, hereditary angioedema, cancer and related diseases including
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to proteins comprising kunitz domain peptide, designated DPI-14 for inhibiting human neutrophil elastase, fused t albumin. The invention is useful for treating cystic fibrosis and z
                                                                                                                                                                                                                                                 Saccharomyces co
Pichia pastoris.
                                                                                                                                                                                                                                                                                       mutagenic;
                                                                                                                                                                                                                                                                                         EPI-hNE-4; EPI-hNE; alpha mutagenic; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New kunitz domain peptide useful as human neutrophil elastase inhibitor for the treatment of e.g. cystic fibrosis and related disease.
                                                                                                                                              23-JAN-2002;
                                                                                                                                                                        23-JAN-2003;
                                                                                                                                                                                                                          WO2003062431-A2
                                                                                                                                                                                                                                                                                                                              Fusion sequence of alpha mating factor and EPI-hNE-4 coding sequences.
                                                                                                                                                                                                                                                                                                                                                                                                           ACF04571
                                                                                                                    (DEBI-)
                                                    2003-598755/56.
DB; ABR84585.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AsnLysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GluAlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAla
                                                                                                                                                                                                                                                                                                                                                                                                           standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGGCTTGCAATCTTCCTATCGTCCGTGGCCCCTTGCATCGCCTTTTTTCCTCGTTGGGCC
                                                                                          Poncin A,
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                                                                                                                                              2002EP-00290166
                                                                                                                                                                        2003WO-EP001212
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                                                                                                                                                                                                                                                                cerevisiae.
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                                                                                                                                                                                                                                                                                                      factor prepropeptide; fusion gene; gene;
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Matches:
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RESULT 8
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DB:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mating factor prepropeptide or its variant, which is modified so as to creplace the lysine residue in position 76 of the amino acid sequence of the naturally occurring prepropeptide by an Alanine residue. The cullectide sequence is ligated to the 5' terminal of a nucleotide sequence is ligated to the 5' terminal of a nucleotide sequence coding for EPI-NNE-4. An expression vector for the sequence is also claimed. The gene construct or vector is useful for transforming microorganisms (particularly yeast) to produce EPI-NNE-4 protein with cullectide sequence, expression vector or microorganism is useful for uncleotide sequence, expression vector or microorganism is useful for producing or secreting a protein, particularly EPI-NNE-4, which contains undetectable levels of the EPI-NNE-4 (n+9). This facilitates further purification steps, and therefore results in economies both on the financial and time-spent scale. The present sequence is a fusion sequence containing the S. cerevisiae alpha mating factor prepropeptide coding sequence and the Pichia pastoris EPI-NNE-4 coding sequence and used in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity:
                 04-JUL-1996.
                                                                                                                                                                    Synthetic
                                                                                                                                                                                                    smokers
                                                                                                                                                                                                                Aprotinin; Kunitz domain; human neutrophil elastase; hNE; connective tissue; alpha 1 protease inhibitor; API; neutrophil; alphal antitrypsin; respiratory disorder; cystic fibrosis;
                                                                                                                                                                                                                                                                                     EPI-HNE-4 Modified Kunitz domain expression cassette
                                                                                                                                                                                                                                                                                                                       14-FEB-1997
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                                                 WO9620278-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 GluAlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAla
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGGCTTGTAACTTGCCAATCGTCAGAGGTCCATGCATTGCTTTCTTCCCAAGATGGGCT
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                                                                                                                 Location/Qualifiers
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                                                                                 "EPI-HNE-4 modified Kunitz
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Genetically engineered human derived Kunitz domains can be used to cinhibit human neutrophil elastase, an enzyme involved in the elimination of chibit human neutrophil elastase, an enzyme involved in the elimination confidence of pathogens and the restructuring of connective tissue. In cases of contity of the circulating alpha-1-protease inhibitor (ApI or alphal cantitypsin), or the inactivation of ApI by oxidation (smokers contitypsin), or the inactivation of the lung tissue may result from the controlled elastolytic activity of human neutrophil elastase. Other crespiratory disorders such as cystic fibrosis are thought to be caused by the controlled elastolytic activity of human neutrophils. The genetically condineered human derived Kunitz domains can be used to treat such crespiratory disorders. See AAR99146-R99211. Fusion genes were used in the production of the Kunitz domain derivatives. Protein expression cassettes care then cloned into the plasmid pHIL-D2 using BatBI and EcoRI control of Pichia pastoris aox1 gene promoter and regulatory sequences cand downstream polyadenylation and transcription termination sequences. The proteins derived from the BPTI and ITI-D2 Kunitz domains. This sequence is a BstBI-AatII-EcoRI expressio cassette for expression of EPI-ture.
 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                             Example 10; Page 75; 105pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                respiratory disorders.
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 BP;
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98 A; 102
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 139 T;
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                                                     265 GAGGCTTGTAACTTGCCAATCGTCAGAGGTCCATGCATTGCTTTCTTCCCAAGATGGGCT
                          21
                                                                    1 GluAlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAla 20
                  PheAspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGly 40
TTCGACGCTGTTAAGGGTAAGTGCGTCTTGTTCCCCATACGGTGGTTGTCAAGGTAACGGT
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Matches:
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RESULT 9 ACF04569

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385

41 AsnLysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56

AACAAGTTCTACTCTGAGAAGGAGTGTAGAGAGTACTGTGGTGTTCCA

432

384

324

ACF04569 standard; DNA; 445

04-DEC-2003 (first entry)

EXEXEXE

P pastoris prepro-EPI-hNE-4 mutated coding sequence.

EPI-hNE-4; EPI-hNE; alpha mating factor prepropeptide; gene; mutant;

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                                                                                                                                                                                                                                                                                                                                 Alignment
                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to a fused gene construct, which comprises CC a nucleotide sequence coding for the Saccharomyces cerevisiae alpha can mating factor prepropeptide or its variant, which is modified so as to CC replace the Lysine residue in position 76 of the amino acid sequence of CC the naturally occurring prepropeptide by an Alanine residue. The nucleotide sequence is ligated to the 5' terminal of a nucleotide sequence coding for EPI-NNE-4. An expression vector for the sequence is also claimed. The gene construct or vector is useful for transforming conicroorganisms (particularly yeast) to produce EPI-NNE-4 protein with CC very low levels of its improperly processed form. The gene construct or vector or microorganism is useful for producing or secreting a protein, particularly EPI-NNE-4 which contains conducing or secreting a protein, particularly EPI-NNE-4, which contains conducted the sequence, expression vector or microorganism is useful for producing or secreting a protein, particularly EPI-NNE-4, which contains contacted the sequence is and therefore results in economies both on the particularly EPI-NNE-4, which contains contacted the present sequence is a mutated version of the Etchia pastoris EPI-NNE-4 coding sequence used in the examplification of the invention
                                                                                                                                                                                                                                                                                                                                                                 Sequence 445 BP;
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producing e.g.
processed form.
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                 AsnLysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56
                                                                                                                               GAGGCTTGTAACTTGCCAATCGTCAGAGGTCCATGCATTGCTTTCTTCCCAAGATGGGCT
                                                                                                                                                   GluAlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAla
                                                               TTCGACGCTGTTAAGGGTAAGTGCGTCTTGTTCCCATACGGTGGTTGTCAAGGTAACGGT
                                                                                PheAspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGly
AACAAGTTCTACTCTGAGAAGGAGTGTAGAGAGTACTGTGGTGTTCCA
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/product= "mutated prepro-EPI-hNE-4"
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RESULT 10
ADF42043
ID ADF42
                  Best Local S
Query Match:
                                      Percent Similarity:
Best Local Similarity:
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                                                                                                                                 Alignment
                                                                                                                                                                                                                                  The invention relates to a novel albumin fusion protein comprising a Kunitz domain peptide or its fragment or variant and an albumin or its fragment or variant. The fusion protein of the invention demonstrates cytostatic and haemostatic activities and may be useful for preparing composition for treating a patient with hereditary angioedema, an angioedema-related disease, cancer, a cancer-related disease or a bleeding disorder, as well as during gene therapy procedures. The curre sequence is that of the C-terminal albumin-(GGS)4GG-DX-890 fusion DNA or the control of the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (AVET )
(AVET )
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(DYAX-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 albumin fusion; Kunitz domain; cytostatic; haemostatic; hereditary angioedema; cancer; bleeding; gene therapy; C-terminal albumin-(GGS)4GG-DX-890 fusion; ds; gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADF42043;
                                                                                                                                                                         Sequence 1965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Albumin fusion protein comprising a Kunitz domain peptide and an albumin, useful for preparing a composition for treating a patient with hereditary angioedema or angioedema-related disease, cancer or bleeding disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hauser H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-FEB-2002; 2002US-0355547P
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AVENTIS BEHRING LLC.
DELTA BIOTECHNOLOGY LTD
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/product= "C-terminal albumin-(GGS)4GG-DX-890 fusion
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/note= "No start or stop codon"
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                                                                      The invention relates to a novel albumin fusion protein comprising a Kunitz domain peptide or its fragment or variant and an albumin or its fragment or variant. The fusion protein of the invention demonstrates cytostatic and haemostatic activities and may be useful for preparing a composition for treating a patient with hereditary angioedema, an angioedema-related disease, cancer, a cancer-related disease or a bleeding disorder, as well as during gene therapy procedures. The curre sequence is that of the N-terminal DX-890-(GGS)4GG-albumin fusion DNA cancer.
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(AVET )
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-FEB-2002; 2002US-0355547P
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                                                                                                                                                                                                                                                                                                                                                  fusion protein comprising a Kunitz domain peptide and an albumin, for preparing a composition for treating a patient with hereditary ema or angioedema-related disease, cancer or bleeding disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AVENTIS BEHRING GMBH.
AVENTIS BEHRING LLC.
DELTA BIOTECHNOLOGY LTD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADF42042.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sion; Kunitz domain; cytostatic; haemostatic;
angioedema; cancer; bleeding; gene therapy;
DX-890-(GGS)4GG-albumin fusion; ds; gene.
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                                                                                                                                                                                                                                                                                                            Page 74; 110pp; English
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                                                                                                                                                                                                                                                                                                                           Kunitz domain peptide; cystic fibrosis; cystic fibrosis related disease; hereditary angicedema; cancer; chronic obstructive pulmonary disease; asthma; bronchitis; acute respiratory syndrome; pneumonia; bleeding; cytostatic; haemostatic; chimeric; DX-890; human albumin; HA; human;
                Example
                                                                                                                                  07-FEB-2003; 2003US-00361997
                                                                                                                                                                                                                                                                                                                                                                        C-terminal DX-890-(GGS)4 GG-albumin fusion
                                                             P-PSDB;
                                                                     WPI; 2004-625120/60
                                                                                       Ladner RC,
                                                                                                       (LADN/)
                                                                                                                                                     07-FEB-2003; 2003US-00361997
                                                                                                                                                                                         US2004171794-A1.
                                                                                                                                                                                                                                                                                Unidentified.
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                                                             ADR90036.
                                                                                                       LADNER R C.
LEY A C.
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                 SEQ
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Matches:
Conservative:
Mismatches:
Indels:
Gaps:
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                                                                                                                                                                                                                                     DX-890- (GGS) 4
                                   neutrophil elastase inhibitor and related disease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    designated DPI-14 for inhibiting human neutrophil elastase, fused to albumin. The invention is useful for treating cystic fibrosis and related diseases, hereditary angioedema, cancer and related diseases including chronic obstructive pulmonary disease, asthma, bronchitis, acute respiratory syndrome, pneumonia and bleeding. The invention acts as a cytostatic and haemostatic agent. The present sequence is a C-terminal DX -890-(GGS)4 GG-albumin fusion DNA. This fusion DNA contains DX-890 cDNA, GS linker region and human albumin (HA). This sequence is used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                   Homo sapiens.
Chimeric.
                                                                                                                                                                                                                                                                                                                                        Kunitz domain peptide; cystic fibrosis; cystic fibrosis related disease; hereditary angioedema; cancer; chronic obstructive pulmonary disease; asthma; bronchitis; acute respiratory syndrome; pneumonia; bleeding; cytostatic; haemostatic; chimeric; DX-890; human albumin; HA; human;
                                                                                                                                                                                                                                                                                                                                                                                                          N-terminal DX-890-(GGS)4 GG-albumin fusion DNA.
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                                                  07-FEB-2003; 2003US-00361997
                                                                             07-FEB-2003;
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                                                                                                                                                                                                                                                                      Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                    18-NOV-2004
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                                                                                                                                   US2004171794-A1.
           (LADN/) LADNER R C. (LEYA/) LEY A C.
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                                                                                                                                                                                                                             Location/Qualifiers
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Pred. No.:
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                                                                                                                                                                                                                                                                                                                                                                                                    albumin fusion; Kunitz
hereditary angioedema;
plasmid pDB2300X2 NotI
                                                                                                                                                                                                                                                                                                                            Synthetic.
Unidentified
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DB; ADR90034.
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829. .2913
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cassette protein"
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                                                                                                                                                                                                                                                                                                                                                                                                       domain; cytostatic; haemostatic;
cancer; bleeding; gene therapy;
expression cassette; ds; gene; D
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Gaps:
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DB:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a novel albumin fusion protein comprising a Kunitz domain peptide or its fragment or variant and an albumin or its fragment or variant. The fusion protein of the invention demonstrates cytostatic and haemostatic activities and may be useful for preparing a composition for treating a patient with hereditary angioedema, an angioedema-related disease, cancer, a cancer-related disease or a bleeding disorder, as well as during gene therapy procedures. The current sequence is that of the albumin fusion protein-related plasmid pDB2300X2 modified NotI expression cassette DNA of the invention which has N-terminal DX-890 and C-terminal linker ready for a second DX-890 sequence.
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Ley AC;
                                                    Kunitz domain peptide; cystic fibrosis; cystic fibrosis related disease; hereditary angioedema; cancer; chronic obstructive pulmonary disease; asthma; bronchitis; acute respiratory syndrome; pneumonia; bleeding; cytostatic; haemostatic; chimeric; human; rHA synthase gene; human albumin; HA; gene; ds.
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                   Homo sapiens
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AVENTIS BEHRING LLC.
DELTA BIOTECHNOLOGY LTD.
DYAX CORP.
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Mismatches:
Indels:
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PheAspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGly TTCGATGCTGTTAAGGGTAAGTGTGTTTTGTTCCCATATGGTGGTTGTCAAGGTAACGGT 1020

960 40

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Percent Similarity:
Best Local Similarity:
Query Match:
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                                                                                                                 Alignment
Pred. No.:
                                                                                                                                               US-10-038-722-27 (1-56) x ADR90045
                                                                                                                                                                The invention relates to proteins comprising kunitz domain peptide, designated DPI-14 for inhibiting human neutrophil elastase, fused to albumin. The invention is useful for treating cytic fibrosis and related diseases, hereditary angioedema, cancer and related diseases including chronic obstructive pulmonary disease, asthma, bronchitis, acute respiratory syndrome, pneumonia and bleeding. The invention acts as a cytostatic and haemostatic agent. The present sequence is a DDE3300X2-2xGS linker fusion DWA. This chimeric DNA contains DX-890 cDNA at its N-terminal end, rHA synthase gene and the linkers at its C-terminal end. This sequence is used in the exemplification of the invention.
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P-PSDB;
                                                                                                                                               Sequence
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                                                                                                                                                                                                                                                                                                        kunitz domain
the treatment
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DB; ADR90046.
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901. .2910
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/product= "Mature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       product= "pDB2300X2-2xGS linker fusion protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'note= "rHA gene"
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                                                                                                                                                                                                                                                                                                      peptide useful of e.g. cystic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       note= "DX-890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 *tag=
                                                           4.48e-35
329.00
100.00%
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100.00%
                                                                                                                                               931 A; 666 C;
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                                          (1-3255)
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                                                                                                                                               769 G;
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fibrosis
                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                             Gaps:
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                                                                                                                                               889
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                                                                                                                                                                                                                                                                                                        neutrophil elastase inhibitor and related disease.
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56
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                                                                                                                                                                                                                                                                                              mat_peptide
                                                                                                                                                                                                                                                                                                            sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                  Kunitz domain peptide; cystic fibrosis; cystic fibrosis related disease; hereditary angioedema; cancer; chronic obstructive pulmonary disease; asthma; bronchitis; acute respiratory syndrome; pneumonia; bleeding; cytostatic; haemostatic; chimeric; human; rHA synthase gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADR90048;
                                                                                                           07-FEB-2003; 2003US-00361997
                                                                                                                          07-FEB-2003; 2003US-00361997
                                                                                                                                                       US2004171794-A1
                                                                                                                                                                                                                                                                                                                                                               Unidentified
                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                        pDB2300X3-2xDX-890 fusion DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-NOV-2004
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             Example 19;
                                                 P-PSDB; ADR90049, ADR90050.
                                                                        Ladner RC,
                                                                                                                                                                                                                                                                                                                                                                       Chimeric
                                                                                                                                                                                                                                                                                                                                                                                            human albumin; HA; DX-890; gene; ds.
                            kunitz domain peptide useful as human the treatment of e.g. cystic fibrosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1021
invention relates to
                                                         2004-625120/60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41
                                                                                     LADNER R
LEY A C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABNLYSPheTyrSerGluLySGluCySArgGluTyrCySGlyValPro
                                                                        Ley AC;
             SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                    2902.
                                                                                                                                                                                                                                                                                               901. .3084
                                                                                                                                                                                          /*tag= g
/note= "GS-linker region
                                                                                                                                                                                                                             note= "GS-linker region DNA"
                                                                                                                                                                                                         note= "rHA gene"
866. .2901
                                                                                                                                                                                                                                                    note= "DX-890 DNA
069. .1110
                                                                                                                                                                                                                                                                          'product= "Mature pDB2300X2-2xGS'
)01. .1068
                                                                                                                                                                                                                                                                                                                    'product= "pDB2300X3-2xDX-890 fusion protein"
'note= "CDS contains two stop codons"
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             73; 123pp; English.
                                                                                                                                                                     "DX-890 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3440
proteins comprising kunitz domain peptide,
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                                                                                                                                                                      #2"
                                                                                                                                                                                                                                                           #1:
                                                                                                                                                                                            DNA"
                           neutrophil elastase inhibitor and related disease.
                                                                                                                                                                                                                                                                                 linker fusion
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ADF42056
ID ADF42
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Query Match:
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      Hauser H,
Ley AC;
                             (AVET )
(AVET )
(DELZ )
(DYAX-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            designated DPI-14 for inhibiting human neutrophil elastase, fused to albumin. The invention is useful for treating cystic fibrosis and related diseases, hereditary angioedema, cancer and related diseases including chronic obstructive pulmonary disease, asthma, bronchitis, acute respiratory syndrome, pneumonia and bleeding. The invention acts as a cytostatic and haemostatic agent. The present sequence is a pDB2300X3-2xDX-890 fusion DNA. This chimeric DNA contains two DX-890 cDNAs, rHA synthase gene and the linkers. This sequence is used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                albumin fusion; Kunitz
hereditary angioedema;
plasmid pDB2300X3 NotI
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                                                                                                                               07-FEB-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Plasmid pDB2300X3 NotI modified expression cassette DNA
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                                                      AVENTIS BEHRING GMBI
AVENTIS BEHRING LLC
DELTA BIOTECHNOLOGY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        standard; DNA; 3441
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 Weimer T,
                                                                                                                               2002US-0355547P
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/product= "Plasmid pDB2300X3 NotI modified expression
cassette protein - 2X DX-890"
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829. .3087
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Romberg
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cancer; bleeding; gene therapy;
expression cassette; ds; gene; D
                                                                                          GMBH.
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Matches:
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   NS,
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   Ladner
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     RC
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Query Match:
DB:
RESULT 18
ADF42068
ID ADF42
XX ADF42
XX 12-FE
CX Plasm
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XX ds; D
OS Synth
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Pred. No.:
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Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a novel albumin fusion protein comprising a Kunitz domain peptide or its fragment or variant and an albumin or its fragment or variant. The fusion protein of the invention demonstrates cytostatic and haemostatic activities and may be useful for preparing a composition for treating a patient with hereditary angioedema, an angioedema-related disease, cancer, a cancer-related disease or a bleeding disorder, as well as during gene therapy procedures. The current sequence is that of the albumin fusion protein-related plasmid pDB2300X3 modified NotI expression cassette DNA of the invention which has 2 DX-890
                                                                                                                                                                                                                                         albumin fusion; Kunitz domain; cytostatic; haemostatic; hereditary angioedema; cancer; bleeding; gene therapy; ds; DPI-14-(GGS)4GG-THA-(GGS)4GG-DX-890 fusion; gene.
               07-FEB-2003;
                                              14-AUG-2003.
                                                                                                                                                                                               Synthetic. Unidentified.
                                                                                                                                                                                                                                                                                                        Plasmid
                                                                                                                                                                                                                                                                                                                                      12-FEB-2004
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                                                                                                                                                                                                                                                                                                       pDB2301X-derived DPI-14-(GGS)4GG-rHA-(GGS)4GG-DX-890
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAAGCCTGTAACTTGCCAATTGTTAGAGGTCCATGTATTGCTTTCTTCCCAAGATGGGCT
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               2003WO-US003616
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                                                                                                                                              Location/Qualifiers 829. .3090
                                                                                        /*teg= a
/product= "Plasmid pDB2301X-derived DPI-14-(GGS)4GG-rHA-
(GGS)4GG-DX-890 fusion precursor protein"
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Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a novel albumin fusion protein comprising a Kunitz domain peptide or its fragment or variant and an albumin or its fragment or variant. The fusion protein of the invention demonstrates cytostatic and haemostatic activities and may be useful for preparing composition for treating a patient with hereditary angioedema, an angioedema-related disease, cancer, a cancer-related disease or a bleeding disorder, as well as during gene therapy procedures. The curr sequence is that of the plasmid pDB2301X-derived DPI-14-(GGS)4GG-THA-(GGS)4GG-DX-890 fusion DNA of the invention. NOTE: This sequence also contains regions of cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (AVET )
(AVET )
(DELZ )
(DYAX-)
                                                Kunitz domain peptide; cystic fibrosis; cystic fibrosis related disea hereditary angioedema; cancer; chronic obstructive pulmonary disease; asthma; bronchitis; acute respiratory syndrome; pneumonia; bleeding; cytostatic; haemostatic; human; rHA synthase gene; human albumin; HA; DPI-14; DX-890; chimeric; gene; ds.
             Homo sapiens.
Chimeric.
                                                                                                                          DPI-14-(GGS)4 GG-rHA-(GGS)4 GG-DX-890 fusion
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useful for
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for preparing a composition for treating a patient wit
ema or angioedema-related disease, cancer or bleeding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AVENTIS BEHRING GMBH
AVENTIS BEHRING LLC.
DELTA BIOTECHNOLOGY
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                                                                                                                                                                                                                                                                        AsnLysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro
                                                                                                                                                                                                                                                                                                                          PheAspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGly
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                                                                                                                                                                                                      standard; DNA;
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US-10-038-722-27
                                             Percent Similarity:
Best Local Similarity:
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                                                                                 Pred. No.:
                                                                                                                                        The invention relates to proteins comprising kunitz domain peptide, designated DPI-14 for inhibiting human neutrophil elastase, fused to albumin. The invention is useful for treating cystic fibrosis and related diseases, hereditary angioedema, cancer and related diseases including chronic obstructive pulmonary disease, asthma, bronchitis, acute respiratory syndrome, pneumonia and bleeding. The invention acts as a cytostatic and haemostatic agent. The present sequence is a DPI-14-(GGS)4 GG-DX-890 fusion DNA. This fusion DNA contains DPI-14 CDNA, GS linker region, THA (human albumin) synthase gene and DX-890 cDNA. This sequence is used in the exemplification of the invention.
                                                                                                                   Sequence 3444 BP; 968 A; 713 C;
                                                                                                                                                                                                                                                                                                                                            WPI; 2004-625120/60
                                                                                                                                                                                                                                                                                                                                                                                                                             07-FEB-2003; 2003US-00361997
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                                                                                                                                                                                                                                                                       Example 22; SEQ ID NO 44; 123pp; English.
                                                                                                                                                                                                                                                                                                                                                                   Ladner RC,
                                                                                                                                                                                                                                                                                             kunitz domain peptide useful as human neutrophil elastase inhibitor the treatment of e.g. cystic fibrosis and related disease.
                                                                                                                                                                                                                                                                                                                                                                                           LADNER R C.
LEY A C.
                                                                                                                                                                                                                                                                                                                                ADR90020,
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2878. .2918
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1122. .2877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   note= "DPI-14 cDNA"
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"GS linker region"
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                                  Conservative: Mismatches: Indels:
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             Genetically engineered human derived Kunitz domains can be used to coinhibit human neutrophil elastase, an enzyme involved in the elimination of of pathogens and the restructuring of connective tissue. In cases of creduction of the circulating alpha-1-protease inhibitor (API or alphai cantitrypsin), or the inactivation of API by oxidation (smokers connective), extensive destruction of the lung tissue may result from controlled elastolytic activity of human neutrophil elastase. Other crespiratory disorders such as cystic fibrosis are thought to be caused by human neutrophil elastase or elease by neutrophils. The genetically controlled fundant derived kunitz domains can be used to treat such crespiratory disorders. See AAR99146-R99211. Fusion genes were used in the production of the Kunitz domain derivatives. Protein expression cassettes are then cloned into the plasmid pHIL-D2 using BstB1 and EcoRI crestriction sites. The cloned sequence is under the transcriptional control of Pichia pastoris aox1 gene promoter and regulatory sequences and downstream polyadenylation and transcription termination sequences. Transformed strains of P. pastoris were used to express the various EPI-creations of the protein sequences are the protein sequences.
                                                                                                                                                                                                                                                                                                                                                                New engineered inhibitors of human -like Kunitz domain for treating, e respiratory disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Aprotinin; Kunitz domain; human neutrophil elastase; hNE; connective tissue; alpha 1 protease inhibitor; API; neutro alphal antitrypsin; respiratory disorder; cystic fibrosis;
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comprises pHIL-D2
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Genetically engineered human derived Kunitz domains can be used to inhibit human neutrophil elastase, an enzyme involved in the elimination of pathogens and the restructuring of connective tissue. In cases of
                                                                                                                                                                                                                                                                                                                                                                      Aprotinin; Kunitz domain; human neutrophil elastase; hNE; connective tissue; alpha 1 protease inhibitor; API; neutrophil; alphal antitrypsin; respiratory disorder; cystic fibrosis;
                                            Example 10; Page 76-81; 105pp; English.
                                                                   respiratory disorders.
                                                                            New engineered inhibitors of human neutrophil elastase - contg. aprotinin -like Kunitz domain for treating, e.g. cystic fibrosis or other
                                                                                                                         WPI; 1996-321851/32.
                                                                                                                                               Ley AC,
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                                                                                                                                              Roberts BL,
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                                                                                                                                               Kent
                                                                                                                                               RВ
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control of Pichia pastoris aoxi gene promoter and regulatory sequences and downstream polyadenylation and transcription termination sequences. Transformed strains of P. pastoris were used to express the various EPI-HNE proteins derived from the BPII and ITI-D2 Kunitz domains. This sequence comprises pHIL-D2 having an EPI-HNE-3 Kunitz domain expression cassette inserted into it. It was designated pD2pick (MFalphaPrePro::EPI-HNE-3). This sequence differs from the sequence given in AAT35166 by having had two restriction sites, one BstBI and one AatII site, removed from the sequence. This means that the Kunitz domain encoding segment is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                reduction of the circulating alpha-1-protease inhibitor (API or alphal antitrypsin), or the inactivation of API by oxidation (smokers emphysema), extensive destruction of the lung tissue may result from uncontrolled elastolytic activity of human neutrophil elastase. Other respiratory disorders such as cystic fibrosis are thought to be caused by human neutrophil elastase release by neutrophils. The genetically engineered human derived Kunitz domains can be used to treat such respiratory disorders. See ARR99146.R99211. Puston genes were used in the respiratory of the content of the cont
Sequence 8590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             production of the Kunitz domain derivatives. Protein expression cassettes are then cloned into the plasmid pHIL-D2 using BstBI and EcoRI restriction sites. The cloned sequence is under the transcriptional
                                                                                                                                                                                                    bounded by unique AatII and EcoRI sites
          BP;
          2265 A; 2026 C; 1972 G;
          2321
                    T;
                    Ç
                    0
                    Other;
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Percent Similarity:
Best Local Similarity:
Query Match: Alignment Scores: Pred. No.: 7.87e-34 324.00 100.00% 100.00% 98.48% Length: Matches: Conservative: Mismatches: 8590 0 0

US-10-038-722-27 (1-56) x AAT35168 (1-8590)

Gaps:

Indels:

밁 Ś Ś S 밁 1272 GACGCTGTTAAGGGTAAGTGCGTCTTGTTCCCATACGGTGGTTGTCAAGGTAACGGTAAC 1212 GCTTGTAACTTGCCAATCGTCAGAGGTCCATGCATTGCTTTCTTCCCAAGATGGGCTTTC 42 22 2 AlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAlaPhe LysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56 1331 1271 41 21

RESULT 22

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1332

AAGTTCTACTCTGAGAAGGAGTGTAGAGAGTACTGTGGTGTTCCA 1376

AAT79078 standard; DNA; 204 BP

AAT79078;

11-NOV-1997 (first entry)

Anti-trypsin inhibitor UTI Kunitz domain 2 coding sequence

Trypsin inhibitor; Kunitz domain; protease; active site; elastase; neutrophil; disease; modification; site directed mutagenesis; ss.

Homo sapiens.

JP09124700-A.

13-MAY-1997

07-NOV-1995; 95JP-00288527.

95JP-00288527

(GREC) GREEN CROSS CORP

WPI; 1997-316576/29. P-PSDB; AAW25930.

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RESULT 23
AAV40045
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Best Local Similarity:
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            WPI; 1998-388051/33
                                                                                                                  05-JAN-1998;
                                                                                                                                            09-JUL-1998.
                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                          UTI CDNA SEQ
                                                                                                                                                                                                                                                                                                                                                                    09-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                     AAV40045 standard; cDNA to mRNA; 204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 204 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      modified protease inhibitors are targeted to the protease elastase, especially from neutrophils and can be used to treat diseases associated with elastase. Modifications of the active site were done by site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This is the nucleotide sequence encoding the anti-trypsin inhibitor UTI Kunitz domain 2. The nucleotide sequence was used to construct a novel protease inhibitor in which the active site residues of the Kunitz doma: 1 (W5929) are substituted (see AAT79080, AAT79081 and AAT79083). The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New protease inhibitor - useful for treating diseases involving elastase
P-PSDB; AAW69521
                                      Kuriyama S,
                                                                                                                                                                      WO9829453-A1.
                                                              (MOCH ) MOCHIDA PHARM CO LTD
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                                                                                                                                                                                                                                                                                                    cortex;
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                                                                                                                                                                                                                                                                                                   cell membrane-directed drug; phospholipid; lipid bilayer;
cortex; blood coagulation; inflammation; immunological dis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATGCTGTCAAGGGGAAGTGCGTCCTCTTCCCCTACGGGGCCTGCCAGGGCAACGGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsn
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAlaPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mutagenesis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGTTCTACTCAGAGAAGGAGTGCAGAGAGTACTGCGGTGTCCCT
                                    Hasegawa
                                                                                                                                                                                                                                                                                                                                          ID NO:27 from WO9829453 Example 13
                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                        96JP-00359053
                                                                                                                   98WO-JP000002
                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                37 A; 56 C;
                                                                                                                                                                                               'note= "no stop codon given"
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296.00
92.73%
92.73%
89.97%
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 67
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 44 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                   immunological disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            174
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Kunitz domain
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Query Match:

Percent Similarity: Best Local Similarity:

4.7e-32 296.00 92.73% 92.73% 89.97%

Length: Matches: Conservative: Mismatches: Indels:

204 0 4 0

Pred. No.: Alignment Scores:

Sequence 204 BP;

37 A; 59 C;

65 G; 43 T; 0 U; 0 Other;

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The present invention describes drug compositions which contain as an active component a peptide which has specific affinity to particular CC phospholipids (such as phosphatidyl ethanolamine or phosphatidyl serine), ce especially to phospholipids which constitute a lipid bilayer of cellular CC cortex and of which the concentration in the bilayer increases in cells which are abnormal (e.g. through injury, denaturation or activation). In CC particular, the peptide contains a sequence having phospholipid affinity CC and a structure of formula (I): (A1)a-(A2)b-(A3)c, where (A1) is one of CC two specific sequences (see AAW69516), (A2) and (A3) are CC TRYLRIHPOSWYHQIALR, LRYLRIHPOSWYHQIALR (see AAW69517) or MEDUGCEAQNLY (see AAW69518); a = 0-5; b = 1-5, and c = 0-5. Preferred are the formulae CC A1-A2-A3, A2-A2-A3, A2-A3, A2-A2-A3, A2-A3, A2-A2-A3, A2-A3, A2-A2-A3, A2-A3, 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Drugs containing peptide(s) with specific affinity to phospholipid(s) such as phosphatidyl serine, for treatment of blood coagulation, inflammatory and immunological disorders.
                                                                                The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Page 83; 117pp; Japanese.
                                                                                     encodes a protein
                                                                                     the present
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124
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                 LysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro
                                                            GATGCTGTCAAGGGGAAGTGCGTCCTCTTCCCCTACGGGGGCTGCCAGGGCAACGGGAAC
                                                                             AspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsn
                                                                                                                                         AlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAlaPhe
AAGTTCTACTCAGAGAAGGAGTGCAGAGAGTACTGCGGTGTCCCT
                                                                                                                        GCCTGCAATCTCCCCATAGTCCGGGGCCCCTGCCGAGCCTTCATCCAGCTCTGGGCATTT
 168
                              56
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RESULT 24
AAQ78607
ID AAQ78
fusion protein; recombinant DNA
                                                                                                                             25-MAR-2003
27-JUL-1995
                                                                                                                                                     AAQ78607;
                                                                                                                                                                    AAQ78607
        01-MAY-1993;
                       29-APR-1994;
                                       17-NOV-1994.
                                                                       Synthetic
                                                                                                              DNA sequence
                                                                                                                                                                     standard; DNA;
                                                                                       DNA
                                                                                                             downstream of DNA encoding
                                                                                                                             (revised)
(first entry)
                       94EP-00106773
         93JP-00128528
                                                                                     protein expression; secretion; alkaline phosphatase;
technology; signal peptide; Escherichia coli; ss.
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                                                                                                               coli alkaline
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phosphatase

(MOCH) MOCHIDA PHARM

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Best Local Similarity:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAQ78607 is a nucleotide sequence which is downstream of a nucleotide sequence that encodes E. coli alkaline phosphatase signal peptide. It encodes the protein shown in AAR65476. Plasmid pM594, used for the expression of AN68 (sic) (see AAR65478), was constructed from plasmid pM552 which contains a tryptophan promoter, a Kanamycin resistant gene and also AAQ78607. The vectors for the expression of AN68, each contain a nucleotide sequence of general formula: j-x-y-z (j = AAQ78606; x = AAQ78598/Q78601; y = a nucleotide sequence that encodes Met; and z represents the nucleotide sequence that encodes Met; and z interest is expressed as a fusion protein contg. 'X' (encoded by x), its expression and/or secretion quantity increases. (Updated on 25-MAR-2003 to correct PN field.)
                        misc_feature
                                                              misc_feature
                                                                                                        Synthetic
                                                                                                                                            Protease inhibitor; core region; dyspnea disease of adult; allergy; polyorgan failure; shock; pancreatitis; chronic articular rheumatism; intravascular coagulation disease; operation invasion; arthritis; ss.
                                                                                                                                                                                               Protease inhibitor gene #3
                                                                                                                                                                                                                           10-MAR-2003
27-JUN-1994
                                                                                                                                                                                                                                                                                            AAQ64758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 210 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 3; Page 15; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Morishita
                                                                                                                   Homo sapiens
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                                                                                                                                                                                                                                                                                                                                               LysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56
                                                                                                                                                                                                                                                                                                                                                                                                                      AspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAlaPhe
                                                                                                                                                                                                                                                                                           standard;
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                                                                                                                                                                                                                           (revised)
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                          /*tag= a
/note= "May be serially deleted
13. .165
                                                                            Location/Qualifiers
note= "Wild type core region"
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                                                                                                                                                                                                                                                                                            210
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Matches:
Conservative:
Mismatches:
Indels:
Gaps:
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Search completed: February 23, Job time: 395 secs

2005, 04:36:01

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                                                                                                                                                                                                                                                          .
No.:
                                                                                                                                                                                                                                                                                                                     The sequences given in AAQ64756-59 are DNA sequences encoding extended versions of a wild type core polypeptide which acts as a protease inhibitor. The peptides encoded by these sequences may also contain deletions within the core region (see also AAQ64751-55). These deletions lead to the production of peptides with enhanced protease inhibitor action. These peptides may be used for the prevention and therapy of diseases related to protease, such as operation invasion, polyorgan failure, shock, pancreatitis, intravascular coagulation disease, dyspnea disease of adult, chronic articular rheumatism, arthritis or allergy. (Updated on 10-MAR-2003 to add missing OS field.)
                                                                                                                                                                                                                                                                                                Sequence 210 BP; 40 A; 60 C; 65 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 11 and 12; Page 3; 27pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New polypeptide - useful for prevention and therapy of diseases related to protease e.g. pancreatitis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1994-002180/01.
P-PSDB; AAR54721.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-MAY-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MOCH ) MOCHIDA PHARM CO LTD
130
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                                                                                                     LysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro
                                                                   AAGTTCTACTCAGAGAAGGAGTGCAGAGAGTACTGCGGTGTCCCT
                                                    GATGCTGTCAAGGGGAAGTGCGTCCTCTTCCCCTACGGGGCCTGCCAGGGCAACGGGAAC
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                                                                                                                                                                                                   4.88e-32
296.00
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92.73%
89.97%
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Matches:
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Result
No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
                                                                                                                                                                                                                                                                  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB DB
                                                                                                                                                                                                 Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of hits satisfying chosen parameters:
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329
                                                                                                                                        100.0
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11:
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Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EACNLPIVRGPCIAFFPRWA.....QGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Copyright
                                                                                                                                                                                                                                                                                                                               /cgn2_6/ptodata/2/pubpaa/US09A_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US09B_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US09B_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US10D_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US10D_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
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/cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB_pep:*
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141
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_6/ptodata/2/pubpaa/USOB_NEW_PUB.pep:*
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                                        US-10-038-722-74

US-10-361-997-59

US-10-361-997-71

US-10-361-997-71

US-10-361-997-75

US-10-361-997-46

US-10-361-997-74
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US-10-456-986A-49: ししキン
US-10-361-997-40 ** しし
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NEW_PUB.pep:*
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49,
40,
59,
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45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25.	24	23	22	21	20	19	18	17	16	15	14
201	203	216	221	261	271	272	272	272	285	287	294	294	294	294	294	296	296	296	296	296	296	296	296	296	296	296	296	296	324		324
61.1	•	65.7	•	79.3	82.4	82.7	82.7		•	•	89.4	89.4	89.4	89.4	89.4	•	•		٠			•	٠	90.0		•	90.0	•	۳	98.5	8
58	58	58	58	58	58	61	61	61	58	58	61	61	13	58	58	366	352	352	352	352	147	147	68	58	58	58	58	57	141	141	56
14	14	14	14	14	14	15	14	10	14	14	15	14	10	16	14	9	15	15	15	15	15	14	15	16	15	14	14	10	14	14	15
US-10-038-722-37	-10-038-722-	US-10-038-722-57	-10-038-722	-10-	US-10-167-351-79	US-10-115-134-35	-10-038-722-	US-09-896-095-178	-10-167-351-	-10-167-351	-10-115-134	US-10-038-722-114	US-09-896-095-171	US-10-361-997-20	US-10-167-351-131	US-09-925-301-1175	-221-278	US-10-291-265-922	-10-291-265	-10-291-172-	-10-298-796-	US-10-038-722-77	-10-298	US-10-361-997-8	US-10-456-986A-31	US-10-038-722-25	US-10-167-351-78 = LF/	US-09-974-026-26 - C	IIS-10-038-722-76 & CV	-10-038-	US-10-456-986A-482LL#2
37,	67,	57,	63, 1	133,	79,	35,	121,	178,		130,	28,	114,	171,	e 20,	e 131,	1175,	281,	922,	450,		24,	Sequence 77, Appl	23,	8	31,	25,	78,	e 26,	76,	е 7	Sequence 48, Appl

ALIGNMENTS

RESULT 1
US-10-038-722-27
; Sequence 27, Application US/10038722
; Publication No. US20030175919A1

GENERAL INFORMATION:

MARKLAND, William

Arthur C.

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                                                                                                                                      US-10-038-722-27
                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: LEY=1B
CURRENT APPLICATION NUMBER: US/10/038,722
CURRENT FILING DATE: 2002-01-08
PRIOR APPLICATION NUMBER: US 08/849,406
PRIOR FILING DATE: 1999-07-21
PRIOR APPLICATION NUMBER: DCT/US95/16349
PRIOR FILING DATE: 1995-12-15
PRIOR APPLICATION NUMBER: US 08/358,160
PRIOR APPLICATION NUMBER: US 08/358,160
PRIOR FILING DATE: 1994-12-16
                                                                                                                                                                                                                                                     SOFTWARE: PatentIn version 3.1
SEQ ID NO 27
LENGTH: 56
                                             Matches
                                                                   Query Match 100.0%;
Best Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: KENT, Rachel B.
APPLICANT: ROBERTS, Bruce L.
APPLICANT: LADNER, Robert C.
TITLE OF INVENTION: ITI-D1 KUNITZ DOMAIN MUTANTS AS
                                                                                                                                                                                 ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                            OTHER INFORMATION: Epi-HNE-4
                                                                                                                                                                                                                                 TYPE: PRT
1 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                             Conservative
                                        Score 329; DB 14;
Pred. No. 2.7e-33;
; Mismatches 0;
                                             Indels
                                                                                      Length
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-10-456-986A-47=1L+2

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                                                                                                                                               ; FEATURE:
; OTHER INFORMATION: Polypeptide sequence
US-10-361-997-40
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US-10-361-997-40
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                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 84
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 40
LENGTH: 56
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 49, Application US/10456986A Publication No. US20040038893A1
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Best Local :
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TITLE OF INVENTION: Prevention and Reduction of
FILE REPERENCE: 3421.1001-002
CURRENT APPLICATION NUMBER: US/10/456,986A
CURRENT FILING DATE: 203-06-06
CURRENT FILING DATE: 203-06-06
                                                                                                                                                                                                                                                                                                                FILE REFERENCE: 3421.1015-000
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Ladner, Robert C. APPLICANT: Ley, Arthur C.
                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Ladner, Robert Charles APPLICANT: Ley, Arthur C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/407,003 PRIOR FILING DATE: 2002-08-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/387,239
PRIOR FILING DATE: 2002-06-07
                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: EPI-HNE-4 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
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                                                                                           Local
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                                                                         56;
                                                                                           Similarity
                     EACNLPIVRGPCIAFFFRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
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Hirani, Shirish
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No. US20040171794A1
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Pred. No. 2.7e-33;
; Mismatches 0;
                                                                       Score 329; DB 16;
Pred. No. 2.7e-33;
; Mismatches 0;
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RESULT 4

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EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP

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GENERAL INFORMATION:

APPLICANT: Ladner, Robert Charles

APPLICANT: Ley, Arthur C.

APPLICANT: Ley, Arthur C.

TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES

FILE REFERENCE: 3421.1015-000

CURRENT APPLICATION NUMBER: US/10/361,997

CURRENT FILING DATE: 2003-02-07

PRIOR APPLICATION NUMBER: US 60/355,547

PRIOR FILING DATE: 2002-02-07

PRIOR FILING DATE: 2002-02-07
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US-10-361-997-59
; Sequence 59, Application US/10361997
; Publication No. US20040171794A1
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PRIOR FILING DATE: 1994-12-16
NUMBER OF SEQ ID NOS: 129
SOFTWARE: PatentIn version 3.1
SEQ ID NO 74
                                                      Best Loc
Matches
                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 84
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 59
LENGTH: 655
TYPE: PRT
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Publication No.
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APPLICANT: LADNER, Robert C.
TITLE OF INVENTION: ITI-DI KUNITZ DOMAIN MUTANTS AS THE INHIBITORS
FILE REFERENCE: LEY-1B
CURRENT APPLICATION NUMBER: US/10/038,722
CURRENT FILING DATE: 2002-01-08
PRIOR APPLICATION NUMBER: US 08/849,406
PRIOR PILING DATE: 1999-07-21
PRIOR APPLICATION NUMBER: US 08/849,406
PRIOR PILING DATE: 1999-07-21
PRIOR APPLICATION NUMBER: DCT/US95/16349
PRIOR APPLICATION DESCRIPTION OF PILING DATE: 1995-12-15
PRIOR FILING DATE: 1995-12-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: LEY, Arthur C. APPLICANT: GUTERMAN, Sor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT ORGANISM: Artificial Sequence
                                                                                                                                                          OTHER INFORMATION: Amino acid sequence of the N-terminal OTHER INFORMATION: DX-890-(GGS)4GG-albumin fusion protei
                                                                                                                                                                                                   ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
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                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    86
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EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 141
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/10038722 vo. US20030175919A1
                                                      100.0%;
ilarity 100.0%;
Conservative (
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                                                      Score 329; DB 16;
Pred. No. 3.1e-32;
D; Mismatches 0;
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Pred. No. 6.7e-33;
); Mismatches 0;
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; OTHER INFORMATION: ; OTHER INFORMATION: US-10-361-997-61
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US-10-361-997-71
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                                                                                                    RESULT 8
                 Sequence 75, Application US/10361997 Publication No. US20040171794A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 71, Application US/10361997 Publication No. US20040171794A1 GENERAL INFORMATION:
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Tocal Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES FILE REFERENCE: 3421.1015-000 CURRENT APPLICATION NUMBER: US/10/361,997 CURRENT FILING DATE: 2003-02-07 CURRENT FILING DATE: 2003-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Ladner, Robert Charles
APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1015-000
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
NUMBER OF SEQ ID NOS: 84
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Ladner, Robert Charles APPLICANT: Ley, Arthur C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 2002-02-07
NUMBER OF SEQ ID NOS: 84
APPLICANT: Ladner, Robert Charles
                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: Amino acid sequence encoded by Notl cassette of OTHER INFORMATION: pDB2300X2 with DX890 (Nterm) and Cterm linker OTHER INFORMATION: ready for second DX890
                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ID NO 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 655
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            56;
                                                                                                                                                                                        1 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                     56;
                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                 100.0%; Score 329; DB 16; larity 100.0%; Pred. No. 3.3e-32; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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Pred. No. 3.1e-32;
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                                                                                                                                                                                                                                                                                        Length 694;
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RESULT 10 US-10-361-997-74

Sequence 74, Application US/10361997 Publication No. US20040171794A1 GENERAL INFORMATION:

APPLICANT: Ladner, Robert Charles
APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1015-000
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR PILING DATE: 2002-02-07

TUMBER OF

SEQ ID NOS: 84

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GENERAL INFORMATION:
APPLICANT: Ladner, Robert Charles
APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1015-000
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
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US-10-361-997-46
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NUMBER OF SEQ ID NOS: 84

SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 75

LENGTH.
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 46
                                                                             Matches
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                                                                                                  Best Local Similarity
                                                                                                                   Query Match
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CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 7:
TYPE: PRT
                                                                                                                                                                                                                                          TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: Amino acid sequence of OTHER INFORMATION: DX-890::(GGS)4GG::HA::(GGS)4GG::DX890
                                                                                                                                                                               OTHER INFORMATION: Secreted product
                                                                                                                                                                                                  ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Artificial Sequence
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Local Similarity 100.0%;
674 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 729
                                                                           56;
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                                     1 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLEPYGGCQGNGNKFYSEKECREYCGVP 56
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                                                                               Conservative
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                                                                                                100.0%; Score 329; DB 16; 100.0%; Pred. No. 3.5e-32;
                                                                             0; Mismatches
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Pred. No. 3.4e-32;
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APPLICANT: Ladner, Robert Charles
APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1015-000
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
NUMBER OF SEQ ID NOS: 84
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 45
LENGTH: 753
                                                                                                                                                                                                                                                             , Sequence 26, Application US/10038; Publication No. US20030175919A1; GENERAL INFORMATION:
, APPLICANT: LEY, Arthur C.
, APPLICANT: GUTERMAN, Sonia K.
, APPLICANT: MARKLAND, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: Translation product of DPI-14-(GGS)4; OTHER INFORMATION: GG-rHA-(GGS)4-GG-DX-890 DNA sequence US-10-361-997-45
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US-10-361-997-45
; Sequence 45, Application US/10361997
; Publication No. US20040171794A1
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; OTHER INFORMATION: Amino acid sequence
; OTHER INFORMATION: with 2 x DX-890
US-10-361-997-74
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Best Local Similarity
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              PRIOR APPLICATION NUMBER: US 08/849,406
PRIOR FILING DATE: 1999-07-21
PRIOR APPLICATION NUMBER: PCT/US95/16349
PRIOR FILING DATE: 1995-12-15
PRIOR APPLICATION NUMBER: US 08/358,160
                                                                                                                                                                              APPLICANT: GUTERMAN, SONIA K.
APPLICANT: MARKLAND, William
APPLICANT: KENT, Rachel B.
APPLICANT: ROBERTS, Bruce L.
APPLICANT: LADNER, Robert C.
TITLE OF INVENTION: ITI-D1 KUNITZ DOMAIN MUTANTS AS THE INHIBITORS
                                                                                                                       CURRENT APPLICATION NUMBER: US/10/038,722
CURRENT FILING DATE: 2002-01-08
                                                                                                                                                               FILE REFERENCE: LEY=1B
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ORGANISM: Artificial Sequence
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FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 753
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                                                                                                                                                                                                                                                                                                                                                                   Application US/10038722
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Pred. No. 3.6e-32;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 329; DB 16;
Pred. No. 3.6e-32;
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Sequence 48, Application US/10456986A
Publication No. US20040038893A1
GENERAL INFORMATION:
APPLICANT: Ladner, Robert C.
APPLICANT: Ley, Arthur C.
APPLICANT: Hirani, Shirish
APPLICANT: Williams, Anthony
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US-10-456-986A-47
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TITLE OF INVENTION: Prevention and Reduction of
FILE REFERENCE: 3421.1001-002
CURRENT APPLICATION NUMBER: US/10/456,986A
CURRENT FILING DATE: 2003-06-06
PRIOR APPLICATION NUMBER: 60/387,239
PRIOR FILING DATE: 2002-06-07
PRIOR APPLICATION NUMBER: 60/407,003
PRIOR FILING DATE: 2002-08-28
                                                      APPLICANT: Ley, Arthur C.
APPLICANT: Hirani, Shirish
APPLICANT: Williams, Anthony
TITLE OF INVENTION: Prevention and Reduction of
FILE REFERENCE: 3421.1001-002
CURRENT APPLICATION NUMBER: US/10/456,986A
CURRENT FILING DATE: 2003-06-06
PRIOR APPLICATION NUMBER: 60/387,239
PRIOR FILING DATE: 2002-06-07
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SOFTWARE: PatentIn version
SEQ ID NO 26
LENGTH: 56
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SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 47
LENGTH: 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 47, Application US/10456986A Publication No. US20040038893A1
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NUMBER OF SEQ
                 PRIOR APPLICATION NUMBER: 60/407,003 PRIOR FILING DATE: 2002-08-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT ORGANISM: Artificial Sequence FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Match 98.5%; Score 324; DB 15; Local Similarity 100.0%; Pred. No. 1.1e-32; les 55; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                       ACNIPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hirani, Shirish
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ley, Arthur C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP
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ilarity 100.0%;
Conservative (
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; Pred. No. 1.1e-32;
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                                                                                                                                                                   of Blood Loss
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                                                                                                                                                                                                                                                                                          US-10-038-722-76
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Publication No. US20030175919A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 72, Application US/10038722
Publication No. US20030175919A1
                                                                                                                                                                                                                          GENERAL INFORMATION:
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Best Local Similarity
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Best Local S
           APPLICANT: GUTERMAN, Sonia K.
APPLICANT: MARKLAND, William
APPLICANT: KENT, Rachel B.
APPLICANT: ROBERTS, Bruce L.
APPLICANT: LADNER, Robert C.
TITLE OF INVENTION: ITI-DI KUNITZ DOMAIN MUTANTS AS nHE INHIBITORS
FILE REFERENCE: LEXY=1B
FILE REFERENCE: LEXY=1B
FULCATION NUMBER: US/10/038,722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/10/038,722
CURRENT FILING DATE: 2002-01-08
PRIOR APPLICATION NUMBER: US 08/849,406
PRIOR FILING DATE: 1999-07-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: GUTERMAN, SONIA K.
APPLICANT: MARKLAND, William
APPLICANT: KENT, Rachel B.
APPLICANT: KENT, Rachel B.
APPLICANT: LADNER, Robert C.
APPLICANT: LADNER, Robert C.
TITLE OF INVENTION: ITI-DI KUNITZ DOMAIN MUTANTS AS
PILE REFERENCE: LEY-1B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: LEY, Arthur C. APPLICANT: GUTERMAN, Son APPLICANT: MARKLAND, Wil
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                                                                                                                                                                           APPLICANT: LEY, Arthur C. APPLICANT: GUTERMAN, Son
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: US 08/358,160 PRIOR FILING DATE: 1994-12-16 NUMBER OF SEQ ID NOS: 129
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PRIOR FILING DATE: 1995-12-15
CURRENT FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT ORGANISM: Artificial Sequence
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ORGANISM: Artificial Sequence
FEATURE:
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2002-01-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98.5%; Score 324; DB 14; 100.0%; Pred. No. 2.8e-32;
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RESULT 18 US-10-167-351-78

Sequence 78, Application US/10167351 Publication No. US20030165896A1 GENERAL INFORMATION:

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NUMBER OF SEQ ID NOS: 105
SOFTWARE: Patentin version 3.1
SEQ ID NO 26
LENGTH: 57
TORGANISM: Unknown
FEATURE:
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                                                                                                                                                              ; OTHER INFORMATION: US-09-974-026-26
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TITLE OF INVENTION: Human Bikunin
FILE REFERENCE: 96-223-ZZ
CURRENT APPLICATION NUMBER: US/09/974,026
CURRENT FILING DATE: 2001-10-10
PRIOR APPLICATION NUMBER: US 09/144,428
PRIOR FILING DATE: 1998-08-31
PRIOR APPLICATION NUMBER: PCT/US97/03894
PRIOR APPLICATION NUMBER: US 08/725,251
PRIOR APPLICATION NUMBER: US 08/725,251
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Best Local S
Matches 55
                                                                               Matches
                                                                                                Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Tamburini, Paul P
APPLICANT: Davis, Gary
APPLICANT: Delaria, Katherir
APPLICANT: Christopher, Marl
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PRIOR FILING DATE: 1999-07-21
PRIOR APPLICATION NUMBER: PCT/US95/16349
PRIOR FILING DATE: 1995-12-15
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PRIOR FILING DATE: 1994-12-16
NUMBER OF SEQ ID NOS: 129
SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: US 60/013,106 PRIOR FILING DATE: 1996-03-11
                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1996-10-04
PRIOR APPLICATION NUMBER: US 60/019,793
PRIOR FILING DATE: 1996-06-14
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ORGANISM: Artificial Sequence
FEATURE:
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                                                                               51;
w
                       2 ACNLPIVRGPCIAFFERWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
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55; Conserv
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ACNLPIVRGPCRAFIQLWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98.5%; Score 324; DB 14; ilarity 100.0%; Pred. No. 2.8e-32; Conservative 0; Mismatches 0;
                                                                             Conservative
                                                                                                                                                                                Kunitz-like domain of inter-alpha-trypsin inhibitor precursor
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                                                                                                  90.0%;
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                                                                                                Score 296; DB 10;
Pred. No. 3.4e-29;
                                                                             Mismatches
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APPLICANT: Ladner, Robert C.
TITLE OF INVENTION: Inhibitors of Human Plasmin Derived From The Kunitz Domains
FILE REFERENCE: DXX-007.2P US-4
CURRENT APPLICATION NUMBER: US/10/167,351
CURRENT FILING DATE: 2002-06-11
PRIOR APPLICATION NUMBER: 09/638,770
PRIOR FILING DATE: 2000-08-15
PRIOR FILING DATE: 2900-08-15
PRIOR FILING DATE: 1999-10-16
PRIOR FILING DATE: 1999-10-29
PRIOR APPLICATION NUMBER: 09/240,136
PRIOR FILING DATE: 1999-01-29
PRIOR FILING DATE: 1997-01-07
PRIOR APPLICATION NUMBER: 08/676,124
PRIOR FILING DATE: 1997-01-07
PRIOR APPLICATION NUMBER: 08/65
PRIOR FILING DATE: 1994-03-10
PRIOR FILING DATE: 1994-03-10
                                                                                                                                                                                ; SEQ ID NO 25
; LENGTH: 58
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-038-722-25
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SEQ ID NO 78
LENGTH: 58
                                                                                                        Query Match
Best Local Similarity
                                                                                Matches
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Best Local Similarity
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APPLICANT: LADNER, Robert C.
TITLE OF INVENTION: ITI-D1 KUNITZ DOMAIN MUTANTS AS THE INHIBITORS
FILE REFERENCE: LEY=1B
                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US 08/358,160 PRIOR FILING DATE: 1994-12-16 NUMBER OF SEQ ID NOS: 129 SOFTWARE: PatentIn version 3.1
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PRIOR FILING DATE: 1999-07-21
PRIOR APPLICATION NUMBER: PCT/US95/16349
PRIOR FILING DATE: 1995-12-15
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CURRENT FILING DATE: 2002-01-08
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NUMBER OF SEQ ID NOS: 137
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                                                                             51;
2 ACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 ACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
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MARKLAND, William
KENT, Rachel B.
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                                                                                  Conservative
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                                                                                                        90.0%;
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                                                                             Score 296; DB 14; Length 58; Pred. No. 3.5e-29; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 58;
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US-10-298-796-23

US-10-298-796-23

; Sequence 23, Application US/10298796

; Publication No. US20030220490A1
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-361-997-8
                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Ladner, Robert Charles
APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOWAIN PEPTIDES
FILE REFERENCE: 3421.1015-000
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
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                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 84

SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 51; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 31
LENGTH: 58
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                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 8, Application US/10361997 Publication No. US20040171794A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/387,239
PRIOR FILING DATE: 2002-06-07
PRIOR APPLICATION NUMBER: 60/407,003
PRIOR FILING DATE: 2002-08-28
NUMBER OF SEQ ID NOS: 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILE REFERENCE: 3421.1001-002
CURRENT APPLICATION NUMBER: US/10/456,986A
CURRENT FILING DATE: 2003-06-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Ladner, APPLICANT: Ley, A:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Williams, Anthony
TITLE OF INVENTION: Prevention and Reduction of Blood Loss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: ITI-D2 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                 Local Similarity 92.7%;
                                                                                                                                            2 ACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACNLPIVRGPCIAFFPRWAFDAVKGKCYLFPYGGCQGNGNKFYSEKECREYCGVP 56
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Hirani, Shirish
                                                                                                                       ACNIPIVRGPCRAFIQLWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 58
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                                                                                                                                                                                                      Score 296; DB 16;
Pred. No. 3.5e-29;
0; Mismatches 4;
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Pred. No. 3.5e-29;
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GENERAL INFORMATION:

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APPLICANT: KURIYAMA, Shinichi
APPLICANT: HASEGAWA, Takashi
TITLE OF INVENTION: CELL MEMBRANE DIRECTED DRUGS
FILE REFERENCE: 1110-253p
CURRENT APPLICATION NUMBER: US/10/298,796
CURRENT FILING DATE: 2002-11-19
PRIOR APPLICATION NUMBER: US/09/331,793
PRIOR FILING DATE: 1999-06-25
NUMBER OF SEQ ID NOS: 67
SOFTWARE: Patentin version 3.0
SEQ ID NO 23
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                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 147
TYPE: PRT
ORGANISM: Homo sapiens
US-10-038-722-77
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US-10-038-722-77
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                                                                                                                                        US-10-298-796-24
                                                                                                                                                           RESULT 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT FILING DATE: 2002-01-08
PRIOR APPLICATION NUMBER: US 08/849,406
PRIOR PRILING DATE: 1999-07-21
PRIOR APPLICATION NUMBER: PCT/US95/16349
PRIOR FILING DATE: 1995-12-15
PRIOR APPLICATION NUMBER: US 08/358,160
PRIOR FILING DATE: 1994-12-16
NUMBER: OF SEQ ID NOS: 129
                                                                         Sequence 24, Application US/10298796 Publication No. US20030220490A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 77, Application US/10038722 Publication No. US20030175919A1 GENERAL INFORMATION:
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Best Local
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CURRENT APPLICATION NUMBER: US/10/038,722
CURRENT FILING DATE: 2002-01-08
            APPLICANT: KURIYAMA, Shinichi
APPLICANT: HASEGAWA, Takashi
TITLE OF INVENTION: CELL MEMBRANE DIRECTED DRUGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: ITI-D1 KUNITZ DOMAIN MUTANTS AS THE INHIBITORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: LEY, Arthur C. APPLICANT: GUTERMAN, Sor
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FILE REFERENCE: 1110-253P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn version 3.1
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                                                                                                                                                                                                                                                                                                                     Local
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                                                                                                                                                                                                                    81 ACNLPIVRGPCRAFIQLWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 51; Conservative
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                                                                                                                                                                                                                                                                                                ch 90.0%; Score 296; DB 14; Similarity 92.7%; Pred. No. 8.7e-29; 51; Conservative 0; Mismatches 4
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ROBERTS, Bruce L.
LADNER, Robert C.
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Pred. No. 4e-29;
0; Mismatches
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Search completed: February 23, 2005, 03:31:47 Job time : 63 secs

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US-10-291-172-281
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                                                                                                                                               ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-291-172-281
                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 09/519,705
PRIOR FILING DATE: 2000-03-07
NUMBER OF SEQ ID NOS: 752
SEQ ID NO 281
LENGTH: 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 281, Applic Publication No. US20 GENERAL INFORMATION:
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LENGTH: 147
                                                                         Matches
                                                                                       Query Match
Best Local Similarity
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CURRENT FILING DATE: 2002-11-19
PRIOR APPLICATION NUMBER: US/09/331,793
PRIOR FILING DATE: 1999-06-25
NUMBER OF SEQ ID NOS: 67
                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 2000-06-17
PRIOR APPLICATION NUMBER: 09/574,454
PRIOR FILING DATE: 2000-05-19
                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 09/665,363
PRIOR FILING DATE: 2000-09-19
PRIOR APPLICATION NUMBER: 09/616,847
PRIOR FILING DATE: 2000-07-14
PRIOR REPLICATION NUMBER: 09/596,193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Hyseq, Inc.
TITLE OF INVENTION: No. US20030228584A1e1
FILE REFERENCE: 21272-045
CURRENT APPLICATION NUMBER: US/10/291,172
CURRENT FILING DATE: 2000-11-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 09/693,267 PRIOR FILING DATE: 2000-10-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          / Match 90.0%;
Local Similarity 92.7%;
les 51; Conservative
286 ACNIPIVRGPCRAFIQLWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  51; Conservative
                   2 ACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
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                                                                         0; Mismatches
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Pred. No. 8.7e-29;
0; Mismatches 4;
                                                                                           Score 296; DB 15;
Pred. No. 2.1e-28;
                                                                                                           Length 352;
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Result
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Maximum Match 100%
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Maximum DB
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1: /cgn2_6/ptodata/1/paa/PCT_NEW_COMB.pep:*

2: /cgn2_6/ptodata/1/paa/US06_NEW_COMB.pep:*

3: /cgn2_6/ptodata/1/paa/US07_NEW_COMB.pep:*

4: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep:*

5: /cgn2_6/ptodata/1/paa/US10_NEW_COMB.pep:*

6: /cgn2_6/ptodata/1/paa/US10_NEW_COMB.pep:*

7: /cgn2_6/ptodata/1/paa/US11_NEW_COMB.pep:*

8: /cgn2_6/ptodata/1/paa/US60_NEW_COMB.pep:*
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length: 2000000000
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329
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1137
195
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841
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770
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US-10-287-436A-471
US-10-287-436A-1168
US-10-903-279-2
US-10-450-763-49445
US-10-450-763-49446
US-10-450-763-6946
US-11-050-926-304
US-11-050-926-304
US-11-050-926-302
US-10-450-763-50314
US-09-700-179B-46
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US-11-028-058-11
PCT-US04-42360-1138
PCT-US04-42360-1362
PCT-US04-42360-1366
PCT-US04-42360-1360
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PCT-US04-42360-1360
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US-11-028-058-5
US-11-028-058-3
           US-09-700-179B-51
US-09-700-179B-18
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Sequence 368, Ap	Sequence 368, App	Sequence 96, Appl		۰	Sequence 65, Appl	59,	Sequence 20, App	Sequence 53, App	Sequence 6, Appl	Sequence 48, App.	Sequence 26, App.	Sequence 316, App	Sequence 47, App	Sequence 1196, A		Sequence 160, App	Sequence 55, App	_	Sequence 2, Appli

ALIGNMENTS

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Sequence 5, Application US/11028058
; GENERAL INFORMATION:
; APPLICANT: HILL, JENNIFER J.
; APPLICANT: HILL, JENNIFER J.
; APPLICANT: WOLFMAN, NEIL M.
; TITLE OF INVENTION: FOLLISTATIN DOMAIN CONTAINING PROTEINS
; FILE REFERENCE: 08702.0015-00
; CURRENT APPLICATION NUMBER: US/11/028,058
; CURRENT FILING DATE: 2005-01-04
; PRIOR APPLICATION NUMBER: US/10/369,736
; PRIOR APPLICATION NUMBER: 00/357,846
; PRIOR APPLICATION NUMBER: 60/357,846
; PRIOR FILING DATE: 2002-02-21
; PRIOR APPLICATION NUMBER: 60/434,645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE 7, Application US/11028058

GENERAL INFORMATION:

APPLICANT: HILL, JENNIFER J.

APPLICANT: WOLFMAN, NEIL M.

FILE OF INVENTION: FOLLISTATIN DOMAIN CONTAINING PROTEINS

FILE REFERENCE: 08702.0015-00

CURRENT APPLICATION UNMBER: US/11/028,058

CURRENT FILING DATE: 2005-01-04

PRIOR APPLICATION NUMBER: US/10/369,736

PRIOR APPLICATION NUMBER: US/10/369,736

PRIOR FILING DATE: 2003-02-21

PRIOR FILING DATE: 2002-02-21

PRIOR FILING DATE: 2002-02-21

PRIOR FILING DATE: 2002-02-21

PRIOR FILING DATE: 2002-02-21

PRIOR FILING DATE: 2003-02-21

PRIOR FILING DATE: 2003-02-21

PRIOR FILING DATE: 2003-02-21
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; TYPE: PRT
; ORGANISM: Homo s
US-11-028-058-7
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US-11-028-058-5
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US-11-028-058-7
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 2002-12-20 NUMBER OF SEQ ID NOS: 53
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ilarity 52.7%;
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Pred. No. 7.1e-16;
0; Mismatches 16
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; PRIOR FILING DATE: 2002-12-20; NUMBER OF SEQ ID NOS: 53; SOFTWARE: PATENTIN Ver. 2.1; SEQ ID NO 5; LENGTH: 640; TYPE: PRT; ORGANISM: Homo sapiens
US-11-028-058-5
                                                                                                       PRIOR APPLICATION NUMBER: US/10/369/736
PRIOR FILING DATE: 2003-02-21
PRIOR PELICATION NUMBER: 60/357,846
PRIOR FILING DATE: 2002-02-21
PRIOR APPLICATION NUMBER: 60/434,645
PRIOR PILING DATE: 2002-12-20
PRIOR PRIOR DATE: 2002-12-20
PRIOR PILING DATE: 2002-02-21
PRIOR PILING DATE: 2002-12-20
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PRIOR PILING DATE: 2002-02-21
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Best Local
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Best Local Similarity
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TITLE OF INVENTION: FOLLISTATIN DOMAIN CONTAINING PROTEINS
FILE REFERENCE: 08702.0015-00

CURRENT APPLICATION NUMBER: US/11/028,058

CURRENT FILING DATE: 2005-01-04

PRIOR APPLICATION NUMBER: US/10/369,736

PRIOR PILING DATE: 2003-02-21

PRIOR PILING DATE: 2002-02-21

PRIOR PILING DATE: 2002-02-21

PRIOR FILING DATE: 2002-02-21
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APPLICANT: WOLFMAN, NEIL M.
TITLE OF INVENTION: FOLLISTATIN DOMAIN CONTAINING PROTEINS
FILE REFERENCE: 08702.0015-00
CURRENT APPLICATION NUMBER: US/11/028,058
CURRENT FILING DATE: 2005-01-04
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NUMBER OF SEQ ID NOS: 53
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Ver.
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ORGANISM: Mus sp
ORGANISM: Mus sp.
                                             LENGTH: 571
TYPE: PRT
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Pred. No. 4.2e-15;
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RESULT 5
US-11-028-058-11
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                                                                                                                                                                                                                                                                                                                                Sequence 1138, Application PC/TUS0442360
GENERAL INFORMATION:
APPLICANT: The General Hospital Corporation doing business
APPLICANT: Hospital / Bayer AG
TITLE OF INVENTION: Nucleotide sequences involved in pain
FILE REFERENCE: 17633/2048
CURRENT APPLICATION NUMBER: PCT/US04/42360
CURRENT APPLICATION NUMBER: 60/531,341
PRIOR APPLICATION NUMBER: 60/531,341
PRIOR FILING DATE: 19-Dec-2003
                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 2587
SOFTWARE: Perl script
SEQ ID NO 1138
LENGTH: 763
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                                                                                               Query Match
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                                                                                                                                                   ORGANISM: Homo sapiens
PUBLICATION INFORMATION:
DATABASE ACCESSION NUMBER: Refseq / NP_057244
DATABASE ENTRY DATE: 2003-10-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/11/028,058
CURRENT FILING DATE: 2005-01-04
PRIOR APPLICATION NUMBER: US/10/369,736
PRIOR FILING DATE: 2003-02-21
PRIOR APPLICATION NUMBER: 60/357,846
PRIOR FILING DATE: 2002-02-21
PRIOR FILING DATE: 2002-02-21
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APPLICANT: WOLFMAN, NEIL M.

TITLE OF INVENTION: FOLLISTATIN DOMAIN CONTAINING PROTEINS
FILE REFERENCE: 08702.0015-00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 2002-12-20
NUMBER OF SEQ ID NOS: 53
SOFTWARE: PatentIn Ver. 2.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT ORGANISM: Homo sapiens
                                                                                                                                                                                                                                          TYPE:
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                                                                           Y Match 47.1%;
Local Similarity 54.9%;
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3 CNLFIVRGECIAFFERWAFDAVKGKCVLFEYGGCQGNGNKFYSEKECREYC 53
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                                                       Score 155; DB 1; ...
Pred. No. 3.1e-12;
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Pred. No. 4.2e-15;
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                                                             Indels
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                                                                                PCT-US04-42360-1360
                                                                                                        RESULT 9
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                   Sequence 1360, Application PC/TUS0442360 GENERAL INFORMATION:
APPLICANT: The General Hospital Corporat
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                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Rattus norvegicus
PUBLICATION INFORMATION:
DATABASE ACCESSION NUMBER: SWISS-Prot / M31322
DATABASE ENTRY DATE: 2003-02-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 2587
SOFTWARE: Perl script
SEQ ID NO 1136
LENGTH: 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: PCT/US04/42360 CURRENT FILING DATE: 2004-12-17
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TITLE OF INVENTION: Nucleotide sequences involved in pain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Homo sapiens
PUBLICATION INFORMATION:
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SOFTWARE: Perl script
EQ ID NO 1362
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/531,341 PRIOR FILING DATE: 19-Dec-2003
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DATABASE ENTRY DATE: 2003-10-04
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                                                                                                                                                                                                                                                                       Local
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                                                                                                                                                                                                                                                   l Similarity
28; Conserv
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                                                                                                                                                                   CSQEAMTGPCRAVMPRWYFDLSKGKCVRFIYGGCGGNRNNFESEDYCMAVC 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CSQEAMTGPCRAVMPRWYFDLSKGKCVRFIYGGCGGNRNNFESEDYCMAVC 360
The General Hospital Corporation doing business as Massachusetts General Hospital / Bayer AG
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                                                                                                                                                                                                                                                                       47.18;
54.98;
                                                                                                                                                                                                                                                 Score 155; DB 1;
Pred. No. 3.1e-12;
2; Mismatches 21
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Pred. No. 3.1e-12;
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                                                                                                                                                                                                                                                                                        Length 765;
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APPLICANT: WOLFMAN, NEIL APPLICANT: WOLFMAN, NEIL APPLICANT CONTAINING PROFILE REFERENCE: 08702.0015-00

CURRENT APPLICATION NUMBER: US/11/028,058

CURRENT FILING DATE: 2005-01-04

PRIOR APPLICATION NUMBER: US/10/369,736

PRIOR APPLICATION NUMBER: 03/57,846

PRIOR APPLICATION NUMBER: 60/357,846

PRIOR FILING DATE: 2002-02-21
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SOFTWARE: FastSEQ for SEQ ID NO 4
                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                           Matches
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LENGTH: 552
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SOPTWARE: Perl script
SEQ ID NO 1360
LENGTH: 765
                                                                                                                                                                                                              Sequence 4,
                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
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                                       CURRENT APPLICATION NUMBER: US/60/647,493
CURRENT FILING DATE: 2005-01-27
NUMBER OF SEQ ID NOS: 11
                                                                                                               APPLICANT: Rubinstein, Amy
TITLE OF INVENTION: TRANSGENIC ZEBRAFISH MODELS
TITLE OF INVENTION: ALZHEIMER'S DISEASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Rattus norvegicus
PUBLICATION INFORMATION:
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                                                                                                        FILE REFERENCE: 26007.0004U1
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SOFTWARE: PatentIn Vei
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 2002-12-20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Mus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DATABASE ACCESSION NUMBER: SWISS-Prot / M31322
DATABASE ENTRY DATE: 2003-02-28
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                                                                                                                                                                                                                                                                                                                      361 DVCALPAVQGPCQGWEPRWAYSPLLQQCHPFVYSGCEGNSNNFETRESCEDACPVP 416
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                                                                                                                                                                                                              Application US/60647493
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                      Windows Version 4.0
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42.9%; Pred. No. 9.8e-12;
                                                                                                                                                                                                                                                                                                                                                                                                           10; Mismatches
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Pred. No. 3.1e-12;
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RESULT 12
US-10-287-436A-471
Genuence 471, Application US/10287436A
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                                                                                                                                                            ; TYPE: PRT ; ORGANISM: Homo sapiens US-10-287-436A-1168
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                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:

APPLICANT: CHILDREN'S HOSPITAL MEDICAL CENTER
APPLICANT: CHILDREN'S HOSPITAL MEDICAL CENTER
TITLE OF INVENTION: METHOD FOR DIAGNOSIS AND TREATMENT OF
TITLE OF INVENTION: RHEUMATOID ARTHRITIS
FILE REFERENCE: 10872.514696
CURRENT APPLICATION UNMBER: US/10/287,436A
CURRENT FILING DATE: 2002-10-31
                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 1446
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1168
LENGTH: 770
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SEQ ID NO 471
LENGIH: 770
                                                                                                  Query Match
Best Local Similarity
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                                                                                 Matches
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ORGANISM: Homo sapiens
-10-287-436A-471
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TITLE OF INVENTION: METHOD FOR DIAGNOSIS AND TREATMENT OF
TITLE OF INVENTION: RHEUMATOID ARTHRITIS
FILE REFERENCE: 10872.514696
CURRENT APPLICATION NUMBER: US/10/287,436A
CURRENT FILING DATE: 2002-10-31
                                                                                                                                                                                                                                                                                                   CURRENT FILING DATE: 2002-10-31
PRIOR APPLICATION NUMBER: US 60/336,220
PRIOR FILING DATE: 2001-10-31
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FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:/note =
OTHER INFORMATION: Synthetic Construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCG 54
                                                                                 26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCG
                              EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCG
EVCSEQAETGPCRAMISRWYFDVTEGKCAPFFYGGCGGNRNNFDTEEYCMAVCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EVCSEQAETGPCRAMISRWYFDVTEGKCAPFFYGGCGGNRNNFDTEEYCMAVCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EVCSEQAETGPCRAMISRWYFDVTEGKCAPFFYGGCGGNRNNFDTEEYCMAVCG 342
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                                                                                 Conservative
                                                                                                  44.48;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.
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Pred. No. 3.2e-
                                                                             Score 146; DB 6; Length 770;
Pred. No. 4.6e-11;
4; Mismatches 24; Indels
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; SEQ ID NO 2
; LENGTH: 770
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-903-279-2
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US-10-903-279-2
                                                                                                                                                        US-10-450-763-49445
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 60736
SOFTWARE: Custom
SEQ ID NO 49445
LENGTH: 772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 49445, App. GENERAL INFORMATION
                                                               Matches
                                                                                 Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
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                                                                                                                                                                        NAME/KEY: DOMAIN
LOCATION: (24)..(188
OTHER INFORMATION: A
OTHER INFORMATION: n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: 790CIP3/US
CURRENT APPLICATION UMMBER: US/10/450,763
CURRENT FILING DATE: 2003-06-11
PRIOR APPLICATION NUMBER: PCT/US01/08631
PRIOR FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/540,217
PRIOR APPLICATION NUMBER: 09/540,217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: 10286-016001
CURRENT APPLICATION NUMBER: US/10/903,279
CURRENT FILING DATE: 2004-07-30
PRIOR APPLICATION NUMBER: US 60/491,485
PRIOR FILING DATE: 2003-07-30
NUMBER OF SEQ ID NOS: 2
SOFTWARE: FASTSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Monsonego, Alon
APPLICANT: Weiner, Howard
APPLICANT: Selkoe, Dennis J.
TITLE OF INVENTION: AMYLOID beta-PEPTIDE AND METHODS OF USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 09/649,167 PRIOR FILING DATE: 2000-08-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Hyseq, Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 2000-03-3:
                                                                                                                                                                                                                                                                                    OTHER INFORMATION: Pancreatic trypsin inhibitor (Kunitz) family proteins domain OTHER INFORMATION: identified by eMATRIX, accession number BL00280, p-value=4.273e-3 OTHER INFORMATION: raw score of 24.61
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: DOMAIN
LOCATION: (298)..(342)
                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       / Match 44.4%; Local Similarity 48.1%; nes 26; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   289 EVCSEQAETGPCRAMISRWYFDVTEGKCAPFFYGGCGGNRNNFDTEEYCMAVCG 342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCG
                                                                                    Similarity
EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCG 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/10903279
                                                                                                                                                                                                                         (24) .. (188)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/10450763
                                                                                                                                                                        Amyloid A4 extracellular domain identified by PFam, aname A4_EXTRA, E-value=1.7e-130, PFam score of 446.9
                                                                                    44.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 146; DB 6; Length 770; Pred. No. 4.6e-11; 4; Mismatches 24; Indels
                                                               Score 146; DB 6;
Pred. No. 4.6e-11;
4; Mismatches 24
                                                                                                    Length 772;
                                                                 Indels
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EVCSEQAETGPCRAMISRWYFDVTEGKCAPFFYGGCGGNRNNFDTEEYCMAVCG 342

Search completed: February 23, 2005, 03:35:44 Job time : 40 secs

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GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd

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-Q=/cgn2_1/USPTO_spool/US1003F722/runat_18022005_145204_14124/app_query.fasta_1.199
-DB=Pending_Patents_NA_Main -QFWT=fastap_-SUFFIX=rnpm -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bIts -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALICN=200 -THR_SCORE=pCt -THR_MAX=100 -THR_MIN=0 -ALIGN=15
-MODE=LOCAL -OUTFWT=pto -NORM=sxt -HEAPSIEE=500 -MINLEN=0 -MAXLEN=200000000
-USER=US10038722_@CGN_1_14972_@runat_18022005_145204_14124 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -MAXIT -DSPELOCK=100 -LONGLOG
-DEV_TIMEDUT=10 -MARNI_TIMEOUT=30 -THREADS=1 -XCAPOP=10 -XCAPEXT=0.5 -FGAPOP=6
-DEV_TIMEDUT=10 -TYGAPEXT=0.5 -DELOP=6 -DELEXT=7
-FGAPOP=10 -YGAPOP=10 -YGAPOEXT=0.5 -DELOP=6 -DELEXT=7
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Maximum DB seq length: 2000000000
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Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Run on:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     45554873 seqs, 20411521753 residues
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Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
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/cgn2
jin2_6/ptodata/1/pna/US087_COMB.seq:*
jin2_6/ptodata/1/pna/US080_COMB.seq:*
jin2_6/ptodata/1/pna/US081_COMB.seq:*
jin2_6/ptodata/1/pna/US081_COMB.seq:*
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jin2_6/ptodata/1/pna/US085_COMB.seq:*
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jin2_6/ptodata/1/pna/US090A_COMB.seq:*
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jin2_6/ptodata/1/pna/US095B_COMB.seq:*
jin2_6/ptodata/1/pna/US095B_CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /pna/PCTUS1_COMB.seq:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               91109746
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| Cgm2_6/ptodata/1/pna/US096C_COMB.seq:
| Cgm2_6/ptodata/1/pna/US095E_COMB.seq:
| Cgm2_6/ptodata/1/pna/US097E_COMB.seq:
| Cgm2_6/ptodata/1/pna/US097E_COMB.seq:
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| Cgm2_6/ptodata/1/pna/US099E_COMB.seq:
| Cgm2_6/ptodata/1/pna/US1010A_COMB.seq:
| Cgm2_6/ptodata/1/pna/US1010A_COMB.seq:
| Cgm2_6/ptodata/1/pna/US101A_COMB.seq:
| Cg
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Sequence 56, Application US/10361997
GENERAL INFORMATION:
APPLICANT: Ledner, Robert Charles
APPLICANT: Ley, Arthur C.
ITITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1015-00
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
NUMBER OF SEQ ID NOS: 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 57, Application US/10361997
GENERAL INFORMATION:
APPLICANT: Ladner, Robert Charles
APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1015-000
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
FRIOR APPLICATION NUMBER: US 60/355,547
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
INUMBER OF 580 ID NOS: 84
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 57
                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION:
; OTHER INFORMATION:
US-10-361-997-57
                                                                                                                                                                        RESULT 2
US-10-361-997-56
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US-10-361-997-57
                                                                                                                                                                                                                                                                                                                                                                                                 US-10-038-722-27 (1-56) x US-10-361-997-57 (1-190)
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SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
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                                                                                                                                                                                                                                                                                                PheAspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGly 40
                                                                                                                                                                                                                      AACAAGTTCTACTCTGAAAAGGAATGTAGAGAATACTGTGGTGTTCCA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA sequence of the C-Terminal BamHI-HindIII DX-890 cDNA
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B US-09-235-076-8710

B US-09-248-797-28240

O US-09-332-782-8710

O US-09-737-223-8710

O US-09-918-995-8710

O US-09-918-995-8710

O US-09-925-564-28240

O US-09-287-618-17842

O US-09-287-618-17842

O US-10-298-7968-28
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Matches:
Conservative:
Mismatches:
Indels:
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Sequence 8710, Ap
Sequence 28240, A
Sequence 8710, Ap
Sequence 8710, Ap
Sequence 8710, Ap
Sequence 28240, A
Sequence 17842, A
Sequence 28, Appl
Sequence 28, Appl
                                                                                                                                                                                                                                                                                  132
                                                                                                                                                                                                                                                                                                                                           72
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Result No.

Length

Description

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

/ggn2_6/ptodata/1/pna/US6032_COMB.seq:*
/ggn2_6/ptodata/1/pna/US6033_COMB.seq:*
/ggn2_6/ptodata/1/pna/US6034_COMB.seq:*
/ggn2_6/ptodata/1/pna/US6035_COMB.seq:*
/ggn2_6/ptodata/1/pna/US6035_COMB.seq:*
/ggn2_6/ptodata/1/pna/US6036_COMB.seq:*
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/ggn2_6/ptodata/1/pna/US6039_COMB.seq:*
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/ggn2_6/ptodata/1/pna/US6044_COMB.seq:*
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/ggn2_6/ptodata/1/pna/US6049_COMB.seq:*
/ggn2_6/ptodata/1/pna/US6050_COMB.seq:*

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TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1015-000
CURRENT APPLICATION UNMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION UNMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
NUMBER OF SEQ ID NOS: 84
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 72
LENGTH: 2007
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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US-10-361-997-72
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                                                                                                                                                       US-10-038-722-27 (1-56) x US-10-361-997-72 (1-207)
                                                                                                                                                                                                                                                                 Pred. No.:
                                                                                                                                                                                                                                                                                Alignment Scores:
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                                                                                                                                                                                                                                  Percent Similarity:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Ladner, Robert Charles APPLICANT: Ley, Arthur C.
                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: OTHER INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                            FEATURE:
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                                                  PheAspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGly 40
                                                                                           GAGGCTTGCAATCTTCCTATCGTCCGTGGCCCTTGCATCGCCTTTTTTCCTCGTTGGGCC
                                                                                                           GluAlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAla
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Matches:
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Indels:
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US-08-849-406-73
; Sequence 73, A
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                                                                                                                                                                                                                                                                                      Query Match:
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Best Local Similarity:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 202-737-3528
INFORMATION FOR SEQ ID NO: 73:
SEQUENCE CHARACTERISTICS:
LENGTH: 444 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PETENTING Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/849,406
FILING DATE: 21-Jul-1999
CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/16349
FILING DATE: 15-DEC-1995
ATTORNEY/AGENT INFORMATION:
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APPLICANT: LEY, Arthur C.
LADNER, Robert C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION: TELEPHONE: 202-628-5197
                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE DESCRIPTION: SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE
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MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: ENGINEERED HUMAN-DERIVED KUNITZ
DOMAINS THAT INHIBIT HUMAN NEUTROPHIL ELASTASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             148 AATAAATTTTATAGCGAGAAAGAGTGCCGTGAGTATTGCGGCGTCCCT 195
                                                                                                                                                      265 GÄGGCTTGTAACTTGCCAATCGTCAGAGGTCCATGCATTGCTTTCTTCCCAAGATGGGCT
                        41 AsnLysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56
                                                                                           21 PheAspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGly 40
                                                                                                                                                                                1 GluAlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAla 20
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AACAAGTTCTACTCTGAGAAGGAGTGTAGAGAGTACTGTGGTGTTCCA 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GUTERMAN, Sonia K. ROBERTS, Bruce L. MARKLAND, William KENT, Rachel B.
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Mismatches:
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Best Local Similarity:
Query Match:
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                                       RESULT 6
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                    US-10-038-722-73
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APPLICATION UNMBER: PCT/US95/16349
FILING DATE: 15-DEC-1995
ATTORNEY/AGENT INFORMATION:

NAME: COOPER, IVER P.

REGISTRATION NUMBER: 28,005
REFERENCE/DOCKET NUMBER: LEY=1A
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-628-5197
TELEPAX: 202-628-5197
TELEPAX: 202-737-3528
INFORMATION FOR SEQ ID NO: 73:
SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/849,406A

FILING DATE: 21-Ual-1999

CLASSIFICATION: 530
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TITLE OF INVENTION: ENGINEERED HUMAN-DERIVED KUNITZ
DOMAINS THAT INHIBIT HUMAN NEUTROPHIL ELASTASE
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                                                                                                                                                              325
                                                                               385
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                                                                                                                                                                                     PheAspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGly 40
                                                                                                                                                                                                                                                                     GluAlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAla 20
                                                                               AACAAGTTCTACTCTGAGAAGGAGTGTAGAGAGTACTGTGGTGTTCCA 432
                                                                                                      AsnLysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56
                                                                                                                                                              TTCGACGCTGTTAAGGGTAAGTGCGTCTTGTTCCCATACGGTGGTTGTCAAGGTAACGGT 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 444 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
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LADNER, Robert C.
GUTERMAN, Sonia K.
ROBERTS, Bruce L.
MARKLAND, William
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Matches:
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Sequence 58, Application US/10361997

Sequence 58, Application US/10361997

GENERAL INFORMATION:
APPLICANT: Ladner, Robert Charles
APPLICANT: Ley, Arthur C.

TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1.015-000

CURRENT APPLICATION NUMBER: US/10/361,997

CURRENT FILING DATE: 2003-02-07

PRIOR APPLICATION NUMBER: US 60/355,547

PRIOR APPLICATION NUMBER: US 60/355,547

PRIOR FILING DATE: 2002-02-07

NUMBER OF SEQ ID NOS: 84

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 58
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US-10-361-997-58
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SEQ ID NO 73
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PRIOR FILING DATE: 1999-07-21
PRIOR APPLICATION NUMBER: PCT/US95/16349
PRIOR FILING DATE: 1995-12-15
PRIOR APPLICATION NUMBER: US 08/358,160
PRIOR FILING DATE: 1994-12-16
NUMBER OF SEQ ID NOS: 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: GUTERMAN, SONIA K.
APPLICANT: MARKLAND, William
APPLICANT: KENT, Rachel B.
APPLICANT: KENT, Rachel B.
APPLICANT: LADNER, Robert C.
CITTLE OF INVENTION: IT DOMAIN MUTANTS AS nHE INHIBITORS
FILE REFERENCE: LEY=18
CURRENT APPLICATION NUMBER: US/10/038,722
CURRENT FILING DATE: 2002-01-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: LEY, Arthur
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ORGANISM: Artificial Sequence
                  OTHER INFORMATION:
OTHER INFORMATION:
                                                                                     TYPE: DNA ORGANISM: Artificial Sequence
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                                                                                                                                    LENGTH:
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                     DNA sequence of the N-Terminal DX-890-(GGS) 4GG-albumin fusion
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APPLICANT: Ladner, Robert Charles
APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
PILE REFERENCE: 3421.1015-000
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
NUMBER OF SEQ ID NOS: 84
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID'NO 60
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Best Local Similarity:
Query Match:
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Best Local Similarity:
Query Match:
                                                               US-10-361-997-70
                                                                                RESULT 9
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US-10-361-997-60
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Sequence 70, Application US/10361997
GENERAL INFORMATION:
APPLICANT: Ladner, Robert Charles
APPLICANT: Ley, Arthur C.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA sequence of the C-terminal albumin-(GGS)4GG-DX-890 fusion
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Percent Similarity:
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 US-10-038-722-27 (1-56)
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Pred. No.:
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CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
NUMBER OF SEQ ID NOS: 84
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 70
                                                                                                                                                                                                                                                                       SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 73
LENGTH: 3440
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GENERAL INFORMATION:
APPLICANT: Ladner, Robert Charles
APPLICANT: Ley, Arthur C.
                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1015-000
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
NUMBER OF SEQ ID NOS: 84
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                                                                                                                                                                                                                       ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                       OTHER INFORMATION: DNA sequence of OTHER INFORMATION: x DX-890
                                                                                                                                                                                                                                                           TYPE: DNA
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x US-10-361-997-73 (1-3440)
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Matches:
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GluAlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAla 20

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Sequence 44, Application US/10361997
GENERAL INFORMATION:
APPLICANT: Ladner, Robert Charles
APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1015-000
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
FRIOR APPLICATION NUMBER: US 60/355,547
PRIOR PILING DATE: 2002-02-07
NUMBER OF SEQ ID NOS: 84
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 44
T.ENGTH: 7444
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US-08-849-406-71
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                                                                                                                                                                                                                                            Sequence 71, Application US/08849406 APPLICANT: LEY, Arthur C.
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TYPE: DNA
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                                                                                                                  APPLICANT: LEY, Arthur C.
LADNER, Robert C.
GUTERMAN, Sonia K.
ROBERTS, Bruce L.
MARKLAND, William
KENT, Rachel B.
KENT, Rachel B.
OF INVENTION: ENGINEERED HUMAN-DERIVED KUNITZ
DOMAINS THAT INHIBIT HUMAN NEUTROPHIL ELASTASE
                                                                                                                                                                                                                                                                                                                                   3040 AATAAATTTTATAGCGAGAAAGAGTGCCGTGAGTATTGCGGCGTCCCT 3087
                                                                                                                                                                                                                                                                                                                                                                                                      2980 TTTGACGCCGTCAAAGGCAAATGCGTCCTTTTTCCTTACGGCGGTTGCCAGGGCAATGGC 3039
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                                                                                   CORRESPONDENCE ADDRESS:
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            CITY: Washington
STATE: District of
                                                 ADDRESSEE: BROWDY AND NEIMARK, STREET: 624 Ninth Street, N.W.
COUNTRY: USA
                                                                                                       OF SEQUENCES: 86
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Matches:
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US-08-849-406A-71
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Query Match:
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                                                                                                                                                        NUMBER OF SEQUENCES: 86
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                                                 COUNTRY: USA
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324.00
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98.48%
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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/849,406
FILING DATE: 21-Jul-1999
CLASSIFICATION ENABLE: PCT/US95/16349
APPLICATION NUMBER: PCT/US95/16349
FILING DATE: 15-DEC-1995
ATTORNEY/AGENT INFORMATION:
APPLICATION NUMBER: 28,005
REGISTRATION NUMBER: 28,005
REGISTRATION INFORMATION:
TELEPHONE: 202-628-5197
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-628-5197
INFORMATION FOR SEQ ID NO: 71:
SEQUENCE CHARACTERISTICS:
LENGTH: 8584 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-038-722-27 (1-56) x US-08-849-406-71 (1-8584)
                                                                                                                                                                                                                         APPLICANT: LEY, Arthur C.
LADNER, Robert C.
GUTERMAN, Sonia K.
ROBERTS, Bruce L.
MARKLAND, William
KENT, Rachel B.
TITLE OF INVENTION: ENGINEERED HUMAN-DERIVED KUNITZ
DOMAINS THAT INHIBIT HUMAN NEUTROPHIL
ZIP: 20001
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: BROWDY AND NEIMARK, P.L.L.C.
STREET: 624 Ninth Street, N.W. Suite 300
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                                                                                               CITY: Washington
STATE: District of Columbia
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Mismatches:
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APPLICATION NUMBER: US/08/849,406A
FILING DATE: 21-Jul-1999
CLASSIFICATION: 530
PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/US95/16349 FILING DATE: 15-DEC-1995

OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:

Version #1.30

IBM PC compatible

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Best Local Similarity:
Query Match:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: COOPER, IVER P.
REGISTRATION NUMBER: 28,005
REFERENCE/DOCKET NUMBER: LEY=
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-628-5197
TELEPHANE: 202-737-3528
INFORMATION FOR SEQ ID NO: 71:
SEQUENCE CHARACTERISTICS:
SOFTWARE: PatentIn version 3.1
SEQ ID NO 71
LENGTH: 8584
                                                                                                                                                                                      APPLICANT: GUTERMAN, Sonia K.
APPLICANT: MARKLAND, William
APPLICANT: KENT, Rachel B.
APPLICANT: KOBERTS, Bruce L.
APPLICANT: LADNER, Robert C.
TITLE OF INVENTION: ITI-DI KUNITZ DOMAIN MUTANTS AS THE INHIBITORS
FILE REFERENCE: LEY-LB
CURRENT APPLICATION NUMBER: US/10/038,722
CURRENT FILING DATE: 2002-01-08
                                                       PRIOR APPLICATION NUMBER: US 08/849,406
PRIOR FILING DATE: 1999-07-21
PRIOR APPLICATION NUMBER: PCT/US95/16349
PRIOR FILING DATE: 1995-12-15
PRIOR APPLICATION NUMBER: US 08/358,160
PRIOR FILING DATE: 1994-12-16
NUMBER OF SEQ ID NOS: 129
                                                                                                                                                                                                                                                                                                               APPLICANT: LEY, Arthur C.
APPLICANT: GUTERMAN, Son
APPLICANT: MARKLAND, Wil
APPLICANT: KENT, Rachel
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TYPE: nucleic acid
STRANDEDNESS: single
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Matches:
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RESULT 15
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Best Local Similarity:
Query Match:
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; OTHER INFORMATION: Plasmid pHIL-D2 (MFalphaPrePro::EPI-HNE-3) (Table 251)
US-10-038-722-71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 75, Application C.
Sequence 75, Application C.
LADNER, Robert C.
LADNER, Robert C.
                                                                                                           TELEFAX: 202-737-3528
INFORMATION FOR SEQ ID NO: 75:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                     COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATION INTERES: US/08/849,406
FILING DATE: 21-Jul-1999
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/16349
APPLICATION NUMBER: PCT/US95/16349
APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/16349
ATTORNEY, ACCUST TATORNEY.
SEQUENCE CHARACTERISTICS:
LENGTH: 8590 base pairs
TYPE: nucleic acid
STRANDENNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GUTERMAN, SONIA K.

ROBERTS, Bruce L.

ROBERTS, Bruce L.

MARKLAND, William

KENT, Rachel B.

TITLE OF INVENTION: ENGINEERED HUMAN-DERIVED KUNITZ

DOMAINS THAT INHIBIT HUMAN NEUTROPHIL ELASTASE
                                                                                                                                                   NAME: Cooper, Iver P.
REGISTRATION NUMBER: 28,005
REFERENCE/DOCKET NUMBER: LEY
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-628-5197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: BROWDY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: BROWDY AND NEIMARK, P.L.L.C. STREET: 624 Ninth Street, N.W. Suite 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: District of Columbia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: USA
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Score:
Percent Similarity:
Best Local Similarity: 1
Query Match:
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Search completed: February 23, 2005, 04:19:26 Job time : 2615 BECB
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                                                                                                                                   US-10-038-722-27 (1-56) x US-08-849-406-75 (1-8590)
                                                                                                                                                                                            Alignment Scores:
Pred. No.:
                                  42 LysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56
                                                                 2.65e-31
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14
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Matches:
Conservative:
Mismatches:
Indels:
Gaps:
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Result
No.
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-Q=/cgn2_1/USPTO_spool/US10038722/runat_18022005_145204_14132/spp_query.fasta_1.199
-Q=/cgn2_1/USPTO_spool/US10038722/runat_18022005_145204_14132/spp_query.fasta_1.199
-DB=Pending_Patents_NA_New -QPWT=fastap_-SUFFIX=rnpn -MINNATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bIts_-START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DCCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15
-MODE=LOCAL_OUTFMT=pto -NORM=ext_-HEAPIXE=500 -MAXLEN=0 -MAXLEN=200000000
-USER=US10038722_@CGN_1_1_229_@runat_18022005_145204_14132 -NCPU=6 -ICPU=3
-NO_MMAP_-LARGEQUERY_NEG_SCORES=0 -MAIT_-DSPBLOCK=100 -LONGLOG
-DEV_TIMBOUT=120 -WARN_TIMBOUT=30 -THREADS=1 -XGAPDE=10 -XGAPEXT=0.5 -FGAPOP=6
-DEV_TIMBOUT=120 -WARN_TIMBOUT=30 -THREADS=1 -XGAPD=10 -XGAPEXT=0.5 -FGAPOP=6
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 200000000
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                                                                                                                                                                                                                              Score
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1: /cgn2_6/ptodata/1/nn:
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Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
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/ Cgn2_6/ptodata/1/pna/US06_NEW_COMB.seq:*
/ Cgn2_6/ptodata/1/pna/US08_NEW_COMB.seq:*
/ Cgn2_6/ptodata/1/pna/US09_NEW_COMB.seq:*
/ Cgn2_6/ptodata/1/pna/US10_NEW_COMB.seq:*
/ Cgn2_6/ptodata/1/pna/US10_NEW_COMB.seq:*
/ Cgn2_6/ptodata/1/pna/US11_NEW_COMB.seq:*
/ Cgn2_6/ptodata/1/pna/US10_NEW_COMB.seq:*
/ Cgn2_6/ptodata/1/pna/US10_NEW_COMB.seq:*
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1731
1923
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1695
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            US-10-485-231-7

US-11-028-058-6

US-11-028-058-4

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US-11-028-058-2

US-11-028-058-48

US-11-028-058-10

PCT-US04-42360-1137
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PCT-US04-42360-1361
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sequence 17, Appl sequence 18, Appl sequence 19,46, A Sequence 19,46, A Sequence 1, Appl sequence 15, Appl sequence 66, Appl sequence 66, Appl sequence 151, App sequence 315, App sequence 25, Appl sequence 25, Appl sequence 54, Appl sequence 349, Appl sequence 342, Appl sequence 342, Appl sequence 343, Appl sequence 37, Appl	e 8, Appl e 1006, A e 19078, e 118, Ap e 118, Ap e 27, App e 301, Ap e 303, Ap e 303, Ap e 3079, e 1, App

ALIGNMENTS

RESULT 1 US-10-485-231-7

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PRIOR APPLICATION NUMBER: 60/311,305
PRIOR FILING DATE: 2001-08-10
PRIOR PELICATION NUMBER: 60/314,734
PRIOR FILING DATE: 2001-08-24
PRIOR APPLICATION NUMBER: 60/318,204
PRIOR APPLICATION NUMBER: 60/318,204
PRIOR FILING DATE: 2001-09-07
PRIOR PEDIICATION NUMBER: 60/326,470
PRIOR FILING DATE: 2001-10-01
NUMBER OF SEQ ID NOS: 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 7, Applicat GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                         SEQ ID NO 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: GENSET
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 142.WO1
CURRENT APPLICATION NUMBER: US/10/485,231
CURRENT FILING DATE: 2004-01-29
                                                                                                                                                                                                                                                                                                                 SOFTWARE:
                                                                              FEATURE:
NAME/KEY: CDS
LOCATION: 264..926
                NAME/KEY: 3'UTR
LOCATION: 927..1436
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LOCATION: 1..263
                                                                                                                                                                                                    FEATURE:
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                                                                                                                                                                                                                                            TYPE: DNA
FEATURE
                                                                  FEATURE
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NAME/KEY: polyA_signal LOCATION: 1404..1409

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                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: WOLFMAN, NEIL M.
TITLE OF INVENTION: FOLLISTATIN DOMAIN CONTAINING PROTEINS
FILE REFERENCE: 08702.0015-00
CURRENT APPLICATION NUMBER: US/11/028,058
CURRENT FILING DATE: 2005-01-04
PRIOR APPLICATION NUMBER: US/10/369,736
PRIOR FILING DATE: 2003-02-21
PRIOR FILING DATE: 2003-02-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 2002-
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TYPE: DNA
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NAME/KEY:
LOCATION:
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                                                     1213 AACAGCCAGACGGGCCAGTGCCAGTCCTTTGTCTATGGTGGCTGCGAGGGCAATGGCAAC 1272
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42 LysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro
                                                                           22 AspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsn 41
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Conservative:
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Sequence 4, Application US/11028058
; GENERAL INFORMATION;
; APPLICANT: HILL, JENNIFER J.
APPLICANT: WOLFMAN, NEIL M.
; APPLICANT: WOLFMAN, NEIL M.
; TITLE OF INVENTION: FOLLISTATIN DOMAIN CONTAINING PROTEINS
; TITLE OF INVENTION: FOLLISTATIN DOMAIN CONTAINING PROTEINS
; TILE REFERENCE: 08702.0015-00
; CURRENT APPLICATION NUMBER: US/11/028,058
; CURRENT FILING DATE: 2005-01-04
; PRIOR APPLICATION NUMBER: US/10/369,736
; PRIOR FILING DATE: 2003-02-21
; PRIOR APPLICATION NUMBER: 60/357,846
; PRIOR APPLICATION NUMBER: 60/434,645
; PRIOR APPLICATION NUMBER: 60/434,645
; PRIOR FILING DATE: 2002-12-20
; NUMBER OF SEQ ID NOS: 53
; NUMBER OF SEQ ID NOS: 53
                                                                                          GENERAL INFORMATION:

APPLICANT: HILL, JENNIFER J.

APPLICANT: WOLFMAN, NEIL M.

APPLICANT: OCLFMAN, NEIL M.

FILE OF INVENTION: FOLLISTATIN DOMAIN CONTAINING PROTEINS

FILE REFERENCE: 08702.0015-00

CURRENT APPLICATION NUMBER: US/11/028,058

CURRENT FILING DATE: 2005-01-04

PRIOR APPLICATION NUMBER: US/10/369,736

PRIOR FILING DATE: 2003-02-21

PRIOR FILING DATE: 2003-02-21

PRIOR PILING DATE: 2002-02-21

PRIOR FILING DATE: 2002-12-20

NUMBER OF SEQ ID NOS: 53
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Best Local Similarity:
Query Match:
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US-11-028-058-4
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                     SOFTWARE: PatentIn Ver.
SEQ ID NO 1
LENGTH: 1716
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1, Application US/11028058
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TYPE: DNA
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Matches:
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RESULT 6
US-11-028-058-48
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Best Local Similarity:
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Pred. No.:
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; ORGANISM: Mus sp
US-11-028-058-2
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Best Local Similarity:
Query Match:
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US-11-028-058-1
                                                                                                                                                                                                                                                                                           US-10-038-722-27 (1-56) x US-11-028-058-2 (1-1716)
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GENERAL INFORMATION:
APPLICANT: HILL, JENNIFER J.
APPLICANT: WOLFMAN, NEIL M.
TITLE OF INVENTION: FOLLISTATIN DOMAIN CONTAINING PROTEINS
FILE REFERENCE: 08702.0015-00
CURRENT APPLICATION NUMBER: US/11/028,058
CURRENT APPLICATION NUMBER: US/11/028,058
CURRENT FILING DATE: 2005-01-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US/10/369,736
PRIOR FILING DATE: 2003-02-21
PRIOR APPLICATION NUMBER: 60/357,846
PRIOR FILING DATE: 2002-02-21
PRIOR APPLICATION NUMBER: 60/434,645
PRIOR APPLICATION NUMBER: 60/434,645
PRIOR FILING DATE: 2002-12-20
NUMBER FILING DATE: 2002-12-20
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                                                                                       PheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56
                                                                                                                                                                   AlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsnLys 42
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                                                         TTTGAAAGCCGTGAGGCTTGTGAGGAGTCGTGTCCCTTCCCG 1302
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Matches:
Conservative:
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Sequence 10, Application US/11028058

GENERAL INFORMATION:

APPLICANT: HILL, JENNIFER J.

APPLICANT: WOLFMAN, NEIL M.

APPLICANT: WOLFMAN, NEIL M.

TITLE OF INVENTION: FOLLISTATIN DOMAIN CONTAINING PRO
FILE REFERENCE: 08702.0015-00

CURRENT APPLICATION NUMBER: US/11/028,058

CURRENT FILING DATE: 2005-01-04

PRIOR APPLICATION NUMBER: US/10/369,736

PRIOR APPLICATION NUMBER: 00/357,846

PRIOR FILING DATE: 2002-02-21

PRIOR PILING DATE: 2002-02-21

PRIOR PILING DATE: 2002-02-21

PRIOR APPLICATION NUMBER: 60/357,846

PRIOR PILING DATE: 2002-02-21

PRIOR APPLICATION NUMBER: 60/357,846

PRIOR APPLICATION NUMBER: 60/357,846

PRIOR APPLICATION NUMBER: 60/357,846
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APPLICANT: HILL, JENNIFER J.
APPLICANT: WOLFMAN, NEIL M.
TITLE OF INVENTION: FOLLISTATIN DOMAIN CONTAINING PROTEINS
FILE REFERENCE: 08702.0015-00
CURRENT APPLICATION NUMBER: US/11/028,058
CURRENT FILING DATE: 2005-01-04
PRIOR APPLICATION NUMBER: US/10/369,736
PRIOR FILLNG DATE: 2003-02-21
PRIOR APPLICATION NUMBER: 60/357,846
PRIOR FILING DATE: 2002-02-21
PRIOR APPLICATION NUMBER: 60/357,846
PRIOR FILING DATE: 2002-02-21
PRIOR FILING DATE: 2002-12-20
NUMBER OF SEQ ID NOS: 53
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Alignment Scores: Pred. No.:
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US-11-028-058-10
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Best Local Similarity:
Query Match:
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                                                                                                                                                             SOFTWARE: Patentin Ver. SEQ ID NO 10
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                                                                                        LENGTH: 1695
TYPE: DNA
ORGANISM: Homo &
                                                                                                                                                                                                            PRIOR FILING DATE: 2002-12-20 NUMBER OF SEQ ID NOS: 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: MUS
FEATURE:
NAME/KEY: CDS
LOCATION: (1).
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  PCT-US04-42360-1361
Sequence 1361, Application PC/TUS0442360
SEQUENCE INFORMATION:
APPLICANT: The General Hospital Corporation doing business as Massachusetts
APPLICANT: Hospital / Bayer AG
APPLICANT: Hospital / Bayer AG
TITLE OF INVENTION: Nucleotide sequences involved in pain
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PCT-US04-42360-1137
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Best Local Similarity:
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GENERAL INFORMATION:
APPLICANT: The General Hospital Corporation doing business
APPLICANT: Hospital / Bayer AG
TITLE OF INVENTION: Nuclectide sequences involved in pain
FILE REFERENCE: 17633/2048
CUGRENT APPLICATION NUMBER: PCT/US04/42360
CUGRENT FILING DATE: 2004-12-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: Perl script
SEQ ID NO 1137
LENGTH: 3727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo sapiens
PUBLICATION INFORMATION:
DATABASE ACCESSION NUMBER: Refseq / NM_016160
DATABASE ENTRY DATE: 2003-10-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 60/531,341
PRIOR FILING DATE: 19-Dec-2003
NUMBER OF SEQ ID NOS: 2587
FILE REFERENCE: 17633/2048
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; TYPE: DNA
; ORGANISM: Mus sp.
US-11-028-058-8
                                                                                                                                                                                                                                                                                                                                 APPLICANT: HILL, JENNIFER J.
APPLICANT: WOLFMAN, NEIL M.
APPLICANT: WOLFMAN, NEIL M.
TITLE OF INVENTION: FOLLISTATIN DOMAIN CONTAINING PROFILE REFERENCE: 08702.0015-00
CURRENT APPLICATION NUMBER: US/11/028,058
CURRENT FILING DATE: 2005-01-04
PRIOR APPLICATION NUMBER: US/10/369,736
PRIOR FILING DATE: 2003-02-21
PRIOR APPLICATION NUMBER: 60/357,846
PRIOR APPLICATION NUMBER: 60/357,846
PRIOR APPLICATION NUMBER: 60/434,645
PRIOR FILING DATE: 2002-02-21
PRIOR FILING DATE: 2002-12-20
NUMBER: 05 SEQ ID NOS: 53
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US-11-028-058-8
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Best Local Similarity:
Query Match:
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                                                  US-10-038-722-27 (1-56) x US-11-028-058-8 (1-1659)
                                                                                                     Query Match:
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                                                                                                                       Best Local Similarity:
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                                                                                                                                        Percent Similarity:
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CURRENT FILING DATE: 2004-12-17
PRIOR APPLICATION NUMBER: 60/531,341
PRIOR FILING DATE: 19-Dec-2003
NUMBER OF SEQ ID NOS: 2587
SOFTWARE: Perl script
SEQ ID NO 1361
LENGTH: 3727
                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 8
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DATABASE ACCESSION NUMBER: Refseq / NM_016160
DATABASE ENTRY DATE: 2003-10-04
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ORGANISM: Homo sapiens
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CTCTCCAAGGGAAAGTGCGTGCGCTTTATATATGGTGGCTGCGGCGCAACAGGAACAAT 1119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGCTCCCAGGAGGCGATGACGGGGCCCTGCCGGGCCGTGATGCCTCGTTGGTACTTCGAC
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54.90%
47.11%
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150.00
60.71%
42.86%
45.59%
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Indels:
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Matches:
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APPLICANT: Hyseq, Inc
TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND PO:
FILE REFERENCE: 790C193/US
CURRENT APPLICATION NUMBER: US/10/450,763
CURRENT FILING DATE: 2003-06-11
PRIOR APPLICATION NUMBER: PCT/US01/08631
PRIOR FILING DATE: 2001-03-30
PRIOR FILING DATE: 2001-03-31
PRIOR FILING DATE: 2000-03-31
PRIOR APPLICATION NUMBER: 09/649,167
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US-10-287-436A-1006
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TITLE OF INVENTION: METHOD FOR DIAGNOSIS AND TRE
TITLE OF INVENTION: RHEUMATIOD ARTHRITIS
FILE REFERENCE: 10872.514696
CURRENT APPLICATION NUMBER: US/10/287,436A
CURRENT FILLING DATE: 2002-10-31
PRIOR APPLICATION NUMBER: US 60/336,220
PRIOR PILLING DATE: 2001-10-31
PRIOR PILLING DATE: 2001-10-31
NUMBER OF SEQ ID NOS: 1446
SOFTWARE: FREUSEQ for Windows Version 4.0
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LENGTH: 669
TYPE: DNA
ORGANISM: Homo sapiens
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                                                                  SEQ ID NO 19078
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                                                                                       NUMBER OF SEQ ID NOS: 60736 SOFTWARE: Custom
ORGANISM: Homo sapiens
                         TYPE:
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No.:
                                         ENGTH: 3414
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Sequence 118, Application US/10287436A
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: CHILDREN'S HOSPITAL MEDICAL CENTER
TITLE OF INVENTION: METHOD FOR DIAGNOSIS AND TRE
TITLE OF INVENTION: RHEUWATOID ARTHRITIS
FILE REFERENCE: 10872.514696
CURRENT APPLICATION NUMBER: US/10/287,436A
CURRENT APPLICATION NUMBER: US/10/287,436A
CURRENT FILING DATE: 2002-10-31
PRIOR APPLICATION NUMBER: US 60/336,220
PRIOR PRIOR FILING DATE: 2001-10-31
NUMBER OF SEO ID NOS: 1446
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Query Match:
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; ORGANISM: Homo
US-10-287-436A-118
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Best Local Similarity:
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OTHER INFORMATION: 99% homologous to Homo sapiens APP precursor, accession number OTHER INFORMATION: A31584, Smith-Waterman Score=1130.
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1132
                                                                          1072 TTTGATGTGACTGAAGGGAAGTGTGCCCCATTCTTTTACGGCGGATGTGGCGGCAACCGG 113
                                                                                                                                                 1012 GAGGTGTGCTCTGAACAAGCCGAGACGGGGCCGTGCCGAGCAATGATCTCCCCGCTGGTAC 1071
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                                 AsnLysPheTyrSerGluLysGluCysArgGluTyrCysGly
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US-10-450-763-19077

RESULT 14

Sequence 19077, Application US/10450763 GENERAL INFORMATION:

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Percent Similarity:
Best Local Similarity:
Query Match:
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US-10-495-300-27
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US-10-450-763-19077
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                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/334,147
PRIOR FILING DATE: 2001-11-28
PRIOR APPLICATION NUMBER: 60/340,465
PRIOR FILING DATE: 2001-12-14
PRIOR APPLICATION NUMBER: 60/373,947
PRIOR FILING DATE: 2002-04-18
NUMBER OF SEQ ID NOS: 40
                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 27, Application US/10495300 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 19077
LENGTH: 3585
                                                                                                                                SEQ ID NO 27
                                                                                                                                                                                                                                                                                                                           APPLICANT: GENSET
TITLE OF INVENTION: Human cDNAs and Proteins and FILE REFERENCE: 159.WO1
CURRENT APPLICATION NUMBER: US/10/495,300
CURRENT FILING DATE: 2004-05-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/450,763
CURRENT FILING DATE: 2003-06-11
PRIOR APPLICATION NUMBER: PCT/US01/08631
PRIOR FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/540,217
PRIOR FILING DATE: 2000-03-31
                                                                                                                                             SOFTWARE: JPatent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 60736
SOFTWARE: Custom
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PRIOR FILING DATE: 2000-08-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Hyseq, Inc
TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
FILE REFERENCE: 790CIP3/US
                                                            LENGTH: 1409
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo sapiens
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                      NAME/KEY:
                                             FEATURE:
NAME/KEY: 5'UTR
LOCATION: 1..317
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1012 GAGGTGTGCTCTGAACAAGCCGAGACGGGGCCGTGCCGAGCAATGATCTCCCGCTGGTAC 1071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41 AsnLysPheTyrSerGluLysGluCysArgGluTyrCysGly 54
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55.56%
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Indels:
Gaps:
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Percent Similarity:
Best Local Similarity:
Query Match:
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Pred. No.:
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                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: polyA_site LOCATION: 1368..1409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: polyA_signal LOCATION: 1345...1350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
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657 AACAGCTACCGCTCTGAGGAGGCCTGCATGCTCCGCTGC 695
                                                                 597 TTTGACGTGGAGAGGAACTCCTGCAATAACTTCATCTATGGAGGCTGCCGGGGCAATAAG 656
                                                                                                                                  537 GAATACTGCACCGCCAACGCAGTCACTGGGCCTTGCCGTGCATCCTTCCCACGCTGGTAC 596
                                41
                                                                                     21 PheAspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGly 40
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318..902
                                                                                                                                                     GluAlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAla 20
                             AsnLysPheTyrSerGluLysGluCysArgGluTyrCys 53
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144.00
56.60%
49.06%
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Matches:
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Search completed: February 23, 2005, 04:29:22 Job time: 595 secs

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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-DB=-Published_Applications_NA -QFMT=fastap_SUFFIX=rnpb -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits_-START=1 -END=-1 -MATRIX=blosum62
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-NCPU=6 -LOCPU=3 -NO MMAP -LARGEQUERY -NOEG_SCORES=0 -MAIT_-DSPBLOCK=100
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-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
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Maximum DB seq length: 200000000
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
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Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
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1: /cgn2 6/ptodata/1/pubpna/US07 PUBCOMB.seq:*

2: /cgn2 6/ptodata/1/pubpna/PCT NEW PUB.seq:*

3: /cgn2_6/ptodata/1/pubpna/US06_NEW PUB.seq:*

4: /cgn2_6/ptodata/1/pubpna/US06_NEW PUB.seq:*
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Copyright (c) 1993 - 2005 Compugen Ltd
                                                                                                               /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
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6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
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186.788 Million cell updates/sec
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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172	172	172	173	173	173	173	176	176	176	182	182	182	182	182	182	205	225	230	258	261	269	277	281	296	296	296	296	296	296	296	296	296	296	324	324	329	329	329	329	329	329	329	329	329	Score	
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-10-239-663-14	-10-029-386-	-10-021-963-1	-10-361-997-5	-10-361-997-	-10-361-997-4	-10-361-997-5	-10-369-738-	38-	-10-369-7	-10-315-380-	09-794-589	-10-007-280	-10-007-280A-12	US-10-369-738-4	US-10-369-738-6	US-09-960-352-15044	-09-960-352-91	US-09-960-352-5187	-10-404-460-	_	09-960-352-4	-09-918-995-317	-09-918-995-	-10-119-926-4	-10-221-278-9	-10-291-17	-10-291-265-6	09-925-301-333	S-09-978-418-7	-10-291-265	-10-298-796-2	US-09-918-995-8710	US-10-298-796-27	-10-038-722-7	-10-038-722-7	-10-361-997-4	-10-361-997-7	-10-361-997-7	-10-361-997-6	US-10-361-997-58	-10-038-722-7	-10-361-997	-10-361-997-	US-10-361-997-57	ID	
e 14,	e 247	equence 1, 1	e 53,	51,	49,	50,	e 48,	2	e 1,	e 1,	1, Apr	e 130,	e 129	e 4, Aj	e 6,	1504	9174,	5187,	e 16, 1	e 271,	4.	3176	equence 3040	48,	equence 93,	93,	e 686,	333,	7, A	equence 214,	equence 28, 1	8710	27,	equence 75,	equence 71, App	equence 4	equence 73, App	equence 7	е 60,	equence 58,	equence 73,	equence 72,	equence 56,	quence 57, Ap	Description	

ALIGNMENTS

RESULT 1

US-10-361-997-57

Sequence 57, Application US/10361997

Publication No. US20040171794A1

GENERAL INFORMATION:
APPLICANT: Ledner, Robert Charles
APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421-1015-000

CURRENT APPLICATION NUMBER: US/10/361,997

CURRENT FILING DATE: 2003-02-07

PRIOR APPLICATION NUMBER: US 60/355,547

PRIOR FILING DATE: 2002-02-07

NUMBER OF SEQ ID NOS: 84

SOFTWARE: PASTSEQ for Windows Version 4.0

SEQ ID NO 57

LENGTH: 190

TYPE: DNA

ORGANISM: Artificial Sequence
FEATURE:

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APPLICANT: Ladner, Robert Charles
APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1015-000
CURRENT APPLICATION NUMBER: US/10/361,'997
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
NUMBER OF SEQ ID NOS: 84
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 56
LENGTH: 195
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Best Local Similarity:
Query Match:
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RESULT 3
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                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE: OTHER INFORMATION: DNA sequence of the N-Terminal BglII-BamHI DX-890 OTHER INFORMATION: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Artificial Sequence
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                                                  AsnLysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56
                                                                                                                    PheAspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGly 40
                                                                                                                                                                 GAAGCCTGTAACTTGCCAATTGTTAGAGGTCCATGTATTGCTTTCTTCCCAAGATGGGCT
                                                                                                                                                                                   GluAlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAla
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APPLICANT: Ladner, Robert Charles
APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1015-000
CURRENT FILING DATE: 2003-02-07
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
UNMBER OF SEQ ID NOS: 84
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 72
SEQ ID NO 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                APPLICANT: ROBERTS, Bruce L.

APPLICANT: LADNER, Robert C.

TITLE OF INVENTION: ITI-DI KUNITZ DOMAIN MUTANTS AS THE FILE REFERENCE: LEY-1B

CURRENT APPLICATION NUMBER: US/10/038,722

CURRENT FILING DATE: 2002-01-08

PRIOR PELLING DATE: 1999-07-21

PRIOR PELLING DATE: 1999-07-21

PRIOR PELLING DATE: 1995-07-21

PRIOR APPLICATION NUMBER: US/10/349

PRIOR APPLICATION NUMBER: US/10/349

PRIOR APPLICATION NUMBER: US/05/16349

PRIOR APPLICATION NUMBER: US/08/358,160

PRIOR FILING DATE: 1994-12-16

NUMBER OF SEQ ID NOS: 129

NUMBER OF SEQ ID NOS: 129
                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: LEY, Arthur C.
APPLICANT: GUTERMAN, Sonia K.
APPLICANT: MARKLAND, William
APPLICANT: KENT, Rachel B.
APPLICANT: ROBERTS, Bruce L.
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Publication No. US20040171794A1
GENERAL INFORMATION:
                                                       SOFTWARE: PatentIn version 3.1
SEQ ID NO 73
LENGTH: 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 73, Application US/10038722 Publication No. US20030175919A1
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ORGANISM: Artificial Sequence
FEATURE:
FEATURE:
               TYPE: DNA ORGANISM: Artificial Sequence
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; OTHER INFORMATION: BstBI-AatII-EcoRI cassette for expression of Epi-HNE-4 (Table; OTHER INFORMATION: )
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RESULT 6
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TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1015-000
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
PRIOR FILING DATE: 2002-02-07
PRIOR FILING DATE: 84
SOFTWARE: FastSEQ for Windows Version 4.0
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LENGTH: 1965
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                             AACAAGTTCTACTCTGAAAAGGAATGTAGAGAATACTGTGGTGTTCCA 168
                                                     AsnLysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56
                                                                                                    TTCGATGCTGTTAAGGGTAAGTGTGTTTTGTTCCCATATGGTGGTTGTCAAGGTAACGGT
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No. US20040171794A1
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Sequence 60, Application US/10361997
Publication No. US20040171794A1
GENERAL INFORMATION:
APPLICANT: Ledy. Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1015-000
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT APPLICATION NUMBER: US 60/355,547
PRIOR APPLICATION WIMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
PRIOR FILING DATE: 2002-02-07
INUMBER OF SEQ ID NOS: 84
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 60
LENGTH: 1965
                                                               Alignment Scores:
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                                           Pred. No.:
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 70
LENGTH: 3255
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Publication No.
                                                                                                                                                                                                                                                                                                          APPLICANT: Ladner, Robert Charles
APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1015-000
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
                                                                                                                       FEATURE:
OTHER INFORMATION:
OTHER INFORMATION:
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                                                                                                                            NotI cassette of pDB2300X2 with DX890 (Nterm) Cterm linker ready for second DX890
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                                                                                                                  US-10-361-997-44
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                                                                Sequence 44, Application No. US20 GENERAL INFORMATION:
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SEQ ID NO 73
LENGTH: 3440
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Publication No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REPERENCE: 3421.1015-000
CURRENT APPLICATION NUMBER: US/10/361,997
CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
RUMBER OF SEO ID NOS: 84
APPLICANT: Ladner, Robert Charles
APPLICANT: Ley, Arthur C.
TITLE OF INVENTION: KUNITZ DOMAIN PEPTIDES
FILE REFERENCE: 3421.1015-000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Ladner, Robert Charles APPLICANT: Ley, Arthur C.
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OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity:
                                                                                                                                                                      1021
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                                                                                                                                                                                    AsnLysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56
                                                                                                                                                                                                                                                        PheAspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGly 40
                                                                                                                                                                                                                                                                                                                          GluAlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAla
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                                                                               Application US/10361997
No. US20040171794A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/10361997
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Indels:
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APPLICANT: GUTERMAN, Sonia K.
APPLICANT: MARKLAND, William
APPLICANT: KENT, Rachel B.
APPLICANT: KENT, Rachel B.
APPLICANT: ROBERTS, Bruce L.
APPLICANT: LADNER, Robert C.
TITLE OF INVENTION: ITI-D1 KUNITZ DOMAIN MUTANTS AS
FILE REFERENCE: LEY=1B
FULE REFERENCE: LEY=1B
CURRENT APPLICATION NUMBER: US/10/038,722
CURRENT FILING DATE: 2002-01-08
PRIOR APPLICATION NUMBER: US 08/849,406
PRIOR APPLICATION NUMBER: PCT/US95/16349
PRIOR APPLICATION NUMBER: PCT/US95/16349
PRIOR APPLICATION NUMBER: US 08/358,160
PRIOR FILING DATE: 1995-12-15
PRIOR FILING DATE: 1994-12-16
NUMBER OF SEQ ID NOS: 129
PRIOR FILING DATE: 1994-12-16
NUMBER OF SEQ ID NOS: 129
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Best Local Similarity:
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                                                                       Pred. No.:
                                                                                        Alignment Scores:
                                                                                                                               US-10-038-722-71
                                                                                                                                                                                                                                         SOFTWARE: PatentIn version 3.1 SEQ ID NO 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: LEY,
APPLICANT: GUTE:
APPLICANT: MARK
APPLICANT: KENT
APPLICANT: ROBE:
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CURRENT FILING DATE: 2003-02-07
PRIOR APPLICATION NUMBER: US 60/355,547
PRIOR FILING DATE: 2002-02-07
NUMBER OF SEQ ID NOS: 84
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 3444
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: DPI-14-(GGS)4
                                                                                                                                                                                                    LENGTH: 8584
TYPE: DNA
                                                                                                                                                OTHER INFORMATION:
                                                                                                                                                                  ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2980
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Matches:
Conservative:
Mismatches:
Indels:
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Matches:
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Best Local Similarity: Query Match:

Mismatches: Conservative:

Percent Similarity:

Score:

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RESULT 12
US-10-298-796-27
; Sequence 27, Application US/10298796
; Publication No. US20030220490A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/038,722
CURRENT FILING DATE: 2002-01-08
PRIOR APPLICATION NUMBER: US 08/849,406
PRIOR FILING DATE: 1999-07-21
PRIOR APPLICATION NUMBER: PCT/US95/16349
PRIOR APPLICATION NUMBER: PCT/US95/16349
PRIOR APPLICATION NUMBER: US 08/358,160
PRIOR FILING DATE: 1995-12-15
PRIOR PILING DATE: 1995-12-16
PRIOR PILING DATE: 1994-12-16
PRIOR FILING DATE: 1994-12-16
PRIOR PILING DATE: 1994-12-16
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APPLICANT: MARKLAND, William
APPLICANT: KENT, Rachel B.
APPLICANT: ROBERTS, Bruce L.
APPLICANT: LADNER, Robert C.
TITLE OF INVENTION: ITI-D1 KUNITZ DOMAIN MUTANTS AS NHE INHIBITORS
FILE REFERENCE: LEY=1B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: LEY, Arthur C. APPLICANT: GUTERMAN, Son APPLICANT: MARKLAND, Wil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity:
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                                                                                                                                                                                                                                                                                  AlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAlaPhe
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Matches:
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Best Local Similarity:
Query Match:
                                                                  US-10-038-722-27 (1-56) x US-09-918-995-8710 (1-408)
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Sequence 8710, Application US/09918995
Publication No. US20030073623A1
GENERAL INFORMATION:
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Best Local Similarity:
Query Match:
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                                                                                                                                                                                                                                                                                                                                                APPLICANT: Hyseq, Inc.
TITLE OF INVENTION: NOVEL NUCLEIC ACID SEQUENCES
TITLE OF INVENTION: FROM VARIOUS CDNA LIBRARIES
FILE REFERENCE: 20411-756
CURRENT APPLICATION NUMBER: US/09/918,995
CURRENT FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: US/09/235,076
PRIOR PLING DATE: 1999-01-20
NUMBER OF SEQ ID NOS: 38054
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APPLICANT: HASEGAWA, Takashi
TITLE OF INVENTION: CELL MEMBRANE DIRECTED DRUGS
FILE REFERENCE: 1110-253P
CURRENT APPLICATION NUMBER: US/10/298,796
CURRENT FILING DATE: 2002-11-19
PRIOR APPLICATION NUMBER: US/09/331,793
PRIOR FILING DATE: 1999-06-25
NUMBER OF SEQ ID NOS: 67
                                                                                                                                                                                                                                                             LENGTH: 408
TYPE: DNA
ORGANISM: Homo
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ORGANISM: Homo
218 GCCTGCAATCTCCCCATAGTCCGGGGCCCCTGCCGAGCCTTCATCCAGCTCTGGGCATTT
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                      2 AlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAlaPhe 21
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Matches:
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Mismatches:
Indels:
Gaps:
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Sequence 214, Application US/10291265

| Publication No. US20030232054A1
| GENERAL INFORMATION:
| APPLICANT: Hyseq, Inc.
| APPLICANT: Hyseq, Inc.
| APPLICANT: Tang et al
| TITLE OF INVENTION: NO. US20030232054A1el Nucleic Acids and Polypeptides
| FILE REFERENCE: 21272-017 (785)
| CURRENT APPLICATION NUMBER: US/10/291,265
| CURRENT FILING DATE: 2000-01-25
| PRIOR APPLICATION NUMBER: 09/491,404
| PRIOR FILING DATE: 2000-01-25
| PRIOR APPLICATION NUMBER: 09/617,746
| PRIOR FILING DATE: 2000-01-25
| PRIOR APPLICATION NUMBER: 09/631,451
| PRIOR FILING DATE: 2000-08-03
| PRIOR FILING DATE: 2000-09-15
| NUMBER OF SEQ ID NOS: 944
| SOFTWARE: FastSEQ for Windows Version 3.0
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; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 28
; LENGTH: 441
; TYPE: DNA
; ORGANISM: Homo Sapiens
US-10-298-796-28
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US-10-291-265-214
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Best Local Similarity:
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Publication No. US20030220490A1
GENERAL INFORMATION:
APPLICANT: KURIYAMA, Shinichi
APPLICANT: HASEGAWA, Takashi
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TITLE OF INVENTION: CELL MEMBRANE DIRECTED
FILE REFERENCE: 1110-253P
CURRENT APPLICATION NUMBER: US/10/298,796
CURRENT FILING DATE: 2002-11-19
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Matches:
Conservative:
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Indels:
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; NAME/KEY: CDS
; LOCATION: (103)..
US-10-291-265-214
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US-09-978-418-7
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Best Local Similarity:
Query Match:
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                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/978,418
CURRENT FILING DATE: 2002-10-15
PRIOR APPLICATION NUMBER: 60/311,305
PRIOR FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: 60/314,734
PRIOR FILING DATE: 2001-08-24
PRIOR APPLICATION NUMBER: 60/318,204
PRIOR FILING DATE: 2001-09-07
PRIOR APPLICATION NUMBER: 60/318,704
PRIOR APPLICATION NUMBER: 60/326,470
PRIOR APPLICATION NUMBER: 60/326,470
PRIOR FILING DATE: 2001-10-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 7, Application US/09978418
Publication No. US20030118997A1
GENERAL INFORMATION:
APPLICANT: Bejanin, Stephan
APPLICANT: Tanaka, Hiroaki
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LENGTH: 1280
                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: JPatent SEQ ID NO 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Tanaka, Hiroaki
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 142.US5.REG
                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 52
                                                                                                                                                                                                                                                                                                                   LENGTH: 14
TYPE: DNA
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ORGANISM: Homo sapiens
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NAME/KEY:
LOCATION:
                                                     NAME/KEY: polyA_signal
LOCATION: 1404..1409
                                                                                                                 NAME/KEY: 3'UTR
LOCATION: 927..1436
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LOCATION: 264..926
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                                                                                                  FEATURE:
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polyA_site
1421..1436
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Matches:
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51
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APPLICANT: Rosen et al.

APPLICANT: Rosen et al.

TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies

FILE REFERENCE: PA106

CURRENT APPLICATION NUMBER: US/09/925,301

CURRENT FILING DATE: 2001-08-10

PRIOR APPLICATION NUMBER: PC1/US00/05882

PRIOR FILING DATE: 2000-03-08

PRIOR PILING DATE: 2000-03-08

PRIOR FILING DATE: 2000-03-12

NUMBER OF 52G ID NOS: 1694

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 33

LENGTH: 1444

TYPE: DNA
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US-10-291-265-686
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Best Local Similarity:
Query Match:
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Best Local Similarity:
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Sequence 686, Application US/10291265
Publication No. US20030232054A1
GENERAL INFORMATION:
APPLICANT: Hyseq, Inc.
APPLICANT: Tang et al
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: Homo sapiens
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Percent Similarity:
Best Local Similarity:
Query Match:
DB:
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; TYPE: DNA
; ORGANISM: Homo s
US-10-291-265-686
                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/291,172
CURRENT FILING DATE: 2000-11-08
PRIOR APPLICATION NUMBER: 09/693,267
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 09/665,363
PRIOR APPLICATION NUMBER: 09/616,847
PRIOR APPLICATION NUMBER: 09/616,847
PRIOR FILING DATE: 2000-07-14
PRIOR FILING DATE: 2000-07-14
PRIOR PILING DATE: 2000-07-14
PRIOR APPLICATION NUMBER: 09/596,193
PRIOR APPLICATION NUMBER: 09/574,454
PRIOR APPLICATION NUMBER: 09/574,454
PRIOR APPLICATION NUMBER: 09/519,705
PRIOR PILING DATE: 2000-05-19
PRIOR PILING DATE: 2000-03-07
NUMBER OF EQ ID NOS: 752
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US-10-291-172-93
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CURRENT FILING DATE: 2000-01-25
PRIOR APPLICATION NUMBER: 09/491,404
PRIOR FILING DATE: 2000-01-25
PRIOR APPLICATION NUMBER: 09/617,746
PRIOR FILING DATE: 2000-07-17
PRIOR APPLICATION NUMBER: 09/631,451
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: 09/633,870
PRIOR APPLICATION NUMBER: 09/633,870
PRIOR APPLICATION NUMBER: 09/633,870
PRIOR FILING DATE: 2000-08-15
PRIOR FILING DATE: 2000-09-15
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                                                                                                                                                        SEQ ID NO 93
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Hyseq, Inc
TITLE OF INVENTION: No. US20030228584A1el Nucleic Acids
FILE REPERENCE: 21272-045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: No. US20030232054A1el Nucleic Acids and Polypeptides FILE REFERENCE: 21272-017 (785)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 944
                NAME/KEY:
LOCATION:
                                                             TYPE: DNA ORGANISM: Homo sapiens FEATURE:
FEATURE:
                                                                                                                                ENGTH:
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                                                                                                                                1721
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                   (284) .. (1339)
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No. US20030228584A1
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Percent Similarity:
Best Local Similarity:
Query Match:
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US-10-291-172-93
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US-10-221-278-93
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US-10-038-722-27 (1-56)
                                   Query Match:
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Best Local Similarity:
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                                                                                                         Score:
                                                                                                                                        Alignment Scores:
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SEQ ID NO 93
LENGTH: 1721
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT FILING DATE: 2002-09-06
PRIOR APPLICATION NUMBER: 09/693,267
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 09/665,363
PRIOR FILING DATE: 2000-09-19
PRIOR FILING DATE: 2000-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 2000-05-19
PRIOR APPLICATION NUMBER: 09/519,705
                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 09/596,193
PRIOR FILING DATE: 2000-06-17
PRIOR APPLICATION NUMBER: 09/574,454
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CURRENT APPLICATION NUMBER: US/10/221,278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Hyseq, Inc
TITLE OF INVENTION: No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 09/616,847
PRIOR FILING DATE: 2000-07-14
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                                                                                                                                                                                                            NAME/KEY: misc feature rocation: (1)...(1721)
                                                                                                                                                                                                                                                                NAME/KEY: CDS
LOCATION: (284)..(1339)
                                                                                                                                                                                                                                                                                                                     ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
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                                               Conservative: Mismatches: Indels:
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Matches:
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Matches:
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Indels:
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Percent Similarity:
Best Local Similarity:
Query Match:
DB:
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, NAME/KEY: misc feature

; LOCATION: (1)...(1781)

; OTHER INFORMATION: n =

US-10-119-926-48
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APPLICANT: Tang, Y. Tom
APPLICANT: Liu, Chenghua
APPLICANT: Asundi, Vinod
APPLICANT: Zhang, Jie
APPLICANT: Ren, Feiyan
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SOFTWARE: pt FL genes Version 1.0
SEQ ID NO 48
LENGTH: 1781
TYPE: DNA
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TITLE OF INVENTION: No. US20030104413A1el Nucleic Acids and
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 789CIP2BCON
CURRENT APPLICATION NUMBER: US/10/119,926
CURRENT FILING DATE: 2002-04-09
PRIOR APPLICATION NUMBER: 09/574,454
PRIOR FILING DATE: 2000-05-19
PRIOR APPLICATION NUMBER: 09/519,705
PRIOR APPLICATION NUMBER: 09/519,705
PRIOR APPLICATION NUMBER: 09/519,705
PRIOR FILING DATE: 2000-03-07
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LOCATION: (344)..(1402)
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                                                                    22 AspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsn 41
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42 LysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56
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Xu, Chongjun
Yang, Yonghong
Xue, Aidong J.
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Chen, Rui-hong
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vo. US20030104413A1
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Matches:
Conservative:
Mismatches:
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Sequence 30403, Application US/09918995

Publication No. US20030073623A1

GENERAL INFORMATION:
APPLICANT: Hyseq, Inc.
TITLE OF INVENTION: NOVEL NUCLEIC ACID SEQUENCES OBTAINED
TITLE OF INVENTION: FROM VARIOUS CDNA LIBRARIES
FILE REFERENCE: 20411-756
CURRENT APPLICATION NUMBER: US/09/918,995
CURRENT FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: US/09/235,076
PRIOR APPLICATION TOMBER: US/09/235,076
PRIOR FILING DATE: 1999-01-20
NUMBER OF SEQ ID NOS: 38054
SOFTWARE: FASTSEQ for Windows Version 3.0
1500 ID NO 30403
                                                                                                                                           TITLE OF INVENTION: NOVEL NUCLEIC ACID SEQUENCES OBT

TITLE OF INVENTION: FROM VARIOUS CDNA LIBRARIES

FILE REFERENCE: 20411-756

CURRENT APPLICATION NUMBER: US/09/918,995

CURRENT FILING DATE: 2001-07-30

PRIOR APPLICATION NUMBER: US/09/235,076

PRIOR APPLICATION NUMBER: US/09/235,076

PRIOR FILING DATE: 1999-01-20

NUMBER OF SEQ ID NOS: 38054

SOFTWARE: FASTSEQ for Windows Version 3.0

SEQ ID NO 31769
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Best Local Similarity:
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                                                                                                                                                                                                                                                                                                                                                  Sequence 31769, Application US/09918995
Publication No. US20030073623A1
GRMERAL INFORMATION:
APPLICANT: Hyseq, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc_feature
LOCATION: (1)...(512)
OTHER INFORMATION: n =
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ORGANISM: Homo sapiens
NAME/KEY: misc_feature
LOCATION: (1)...(466)
OTHER INFORMATION: n = A,T,C or
                                                                   FEATURE:
                                                                                  TYPE: DNA
ORGANISM: Homo sapiens
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RESULT 25
US-10-322-281-271/c
(S-10-322-281-271/c
; Sequence 271, Application US/10322281
; Publication No. US20040126762A1
; GENERAL INFORMATION:
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Best Local Similarity:
Query Match:
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Best Local Similarity:
Query Match:
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SEQ ID NO 4435
LENGTH: 435
TYPE: DNA
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Patent No. US20020137139A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Walren, Wesley C.
APPLICANT: Tao, Nenghing
APPLICANT: Tao, Nenghing
APPLICANT: Byatt, John C.
APPLICANT: Byatt, John C.
APPLICANT: Mathialagan, Nagappan
APPLICANT: MICCLEIC ACID AND OTHER MOLECULES ASSOCIATED WITH LACTATION AND
TITLE OF INVENTION: MUSCLE AND FAT DEPOSITION
FILE REFERENCE: 15511.006/37-21(10298)C
CURRENT APPLICATION NUMBER: US/09/960,352
CURRENT FILING DATE: 2001-09-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Bos taurus
OTHER INFORMATION: Clone
                                                                                                                                                                                                                                                         256
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Search completed: February 23, 2005, 06:34:28 Job time: 1784 secs
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Query Match:
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PEATURE:
NAME/KEY: misc_feature
COCATION: (1)...(120339)
OTHER INFORMATION: n = A,T,C or G
US-10-322-281-271
                                                                                                                                                                                                                                  US-10-038-722-27 (1-56) x US-10-322-281-271 (1-120239)
                                                                                                                                                                                                                                                                                                                                         Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: David W. Morris
APPLICANT: Marc S. Malandro,
TITLE OF INVENTION: Novel Compositions and Methods in Cancer
FILE REFERENCE: 529452001000
CURRENT APPLICATION NUMBER: US/10/322,281
CURRENT FILING DATE: 2002-12-17
NUMBER OF SEQ ID NOS: 866
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 271
LENGTH: 120239
                                                       120145 GATGCAGCACAAGGGAAGTGCATCCAATTCCACTACGGGGGGCTGCAAAGGCAACGGCAAC 120086
                                                                                                                                 22 AspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsn 41
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87.27%
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Matches:
Conservative:
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-Q2-/Ggn2_1/USPTO_spool/US1038722/runat_18022005_145235_14331/app_query.fasta_1.199
-Q2-/Ggn2_1/USPTO_spool/US1038722/runat_18022005_145235_14331/app_query.fasta_1.199
-DB=EST -QFWT=fastap_SUFFIX=rst -MINATCH=0.1 -TOOPCL=0 -LOOPEXT=0
-UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45
-DCCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=25 -MODE=LOCAL
-OUTFWT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-USER=US10038722 -GCGN 1_4352 -MCGN=5 -USPURATE -14321 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WALT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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Perfect score:
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                                                                                                                        Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            seq length: 0 seq length: 2000000000
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Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
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Match Length
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Copyright (c) 1993 - 2005 Compugen Ltd
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gb_est6:**
gb_gss1:**
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gb_htc:*
gb_est3:*
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   AI246161
AV720273
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AV686452
AV657651
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AI114613
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AV696152 AV696152
AV686452 AV688452
AV657651 AV657651
AV656508 AV655508
AV695187 AV695187
AV682129 AV682129
AII14613 HA1200 Hu
AI246161 q129b06.x
AV720273 AV720273
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LOCUS
LOCUS
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VERSION
VERSION
KEYWORDS
SOURCE
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ALIGNMENTS

/organism="Homo sapiens"	source
Location/Qualifiers	ATURES
Email: hanzg@chgc.sh.cn This clone is available at CHGC in Shanghai.	
Fax: 86-21-50801922	
Tel: 86-21-50801919(ex.45)	
201203, P. R. China	
351 Guo Shoujing Road, Zhangjiang Hi-Tech Park, Pudong, Shanghai	
Chinese National Human Genome Center at Shanghai	
Contact: Zeguang Han	MMENT
11752456	PUBMED
21625106	MEDLINE
Proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)	JOURNAL
with those of corresponding noncancerous liver	
by comparing gene expression profiles of hepatocellular carcinoma	
Insight into hepatocellular carcinogenesis at transcriptome level	TITLE
Hu, G., Gu, J., Chen, Z. and Han, Z.	
Shen, K., Lu, G., Fu, G., Zhong, M., Xu, S., Gu, W., Huang, W., Zhao, X.,	
Xiao, H., Qu, J., Liu, F., Huang, Q., Cheng, Z., Li, N., Du, J., Hu, W.,	
Xu,X., Huang,J., Xu,Z., Qian,B., Zhu,Z., Yan,Q., Cai,T., Zhang,X.,	AUTHORS
1 (bases 1 to 383)	FERENCE
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.	
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	
Homo sapiens	ORGANISM
Homo sapiens (human)	URCE
EST.	YWORDS
AV696152.1 GI:10298015	RSION
AV696152	CESSION
AV696152 GKC Homo sapiens cDNA clone GKCBPG06 5', mRNA sequence.	FINITION
AV696152 383 bp mRNA linear EST 16-JAN-2002	cus '
	696152

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US-10-038-722-27 (1-56) x AV696152 (1-383)
                                                                                                                                                                                                                                                                                                                                                                                  Eukaryoča; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 387)

Xu,X., Huang,J., Xu,Z., Qian,B., Zhu,Z., Yan,Q., Cai,T., Zhang,X., Xiao,H., Qu,J., Liu,F., Huang,Q., Cheng,Z., Li,N., Du,J., Hu,W., Shen,K., Lu,G., Pu,G., Zhong,M., Xu,S., Gu,W., Huang,W., Zhao,X., Hu,G., Gu,J., Chen,Z. and Han,Z.

Hu,G., Gu,J., Chen,Z. and Han,Z.

Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
                                                                                                                                                                    Email: hanzg@chgc.sh.cn
This clone is available at CHGC in
Location/Qualifiers
                                                                                                                                                                                                                                  Contact: Zeguang Han Chinese National Human Genome Center at Shanghai Chinese National Human Genome Center at Shanghai 351 Guo Shoujing Road, Zhangjiang Hi-Tech Park, Pudong, Shanghai 201203, P. R. China Tel: 86-21-50801919 (ex.45) Fax: 86-21-50801922
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AV686452 GKC Homo sapiens
AV686452
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                                                                                           /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /tissue_type="hepatocellular carcinoma"
/dev_stage="Adult"
/lab_host="SOLR"
                /tissue_type="hepatocellular carcinoma"
/dev_stage="Adult"
/lab_host="SOLR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone_lib="GKC"
/note="Vector: pBluescript sk(-);    Site_1: EcoRI;    Site_2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               clone="GKCBPG06"
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                                                                             clone="GKCAEF08"
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  lib="GKC"
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AV657651
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Homo sapiens

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Query Match: DB:

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US-10-038-722-27 (1-56) x AV686452 (1-387)
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1 (bases 1 to 394)

Xu,X., Huang,J., Xu,Z., Qian,B., Zhu,Z., Yan,Q., Cai,T., Zhang,X., Xiao,H., Qu,J., Liu,F., Huang,Q., Cheng,Z., Li,N., Du,J., Hu,W., Shen,K., Lu,G., Fu,G., Zhong,M., Xu,S., Gu,W., Huang,W., Zhao,X., Hu,G., Gu,J., Chen,Z. and Han,Z.

Tnsight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Zeguang Han
Chinese National Human Genome Center at Shanghai
351 Guo Shoujing Road, Zhangjiang Hi-Tech Park, Pudong, Shanghai
201203, P. R. China
Tel: 86-21-50801919 (ex.45)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AV657651.1 GI:9878665
                                                                                                                                                                                                                                                                                                                                                                                    Email: hanzg@chgc.sh.cn
This clone is available at CHGC
                                                                                                                                                                                                                                                                                                                                                                                                                                Fax: 86-21-50801922
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XhoI"
                                                                                                                                                                           /tissue_type="corresponding
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/clone="GLCFEB05"
                                                                                                                                                                                                                                                                                                                                                             ocation/Qualifiers
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CDNA clone GLCFEB05 3', mRNA sequence.
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US-10-038-722-27
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Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver Proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
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                                                                                                                                                                                                                                                                                                                                                                                                                           Contact: Zeguang Han
Chinese National Human Genome Center at Shanghai
351 Guo Shoujing Road, Zhangjiang Hi-Tech Park,
201203, P. R. China
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 417)
                                                                                                                                                                                                                                                                                                                                                            Email: hanzg@chgc.sh.cn
This clone is available at CHGC
                                                                                                                                                                                                                                                                                                                                                                                             Tel: 86-21-50801919(ex.45)
Fax: 86-21-50801922
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(1-56) x AV656508
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                                                                                                                                                                    /clone_lib="GLC"
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xhoI"
                                                                                                                                                                                                                tissue_type="corresponding/dev_stage="Adult"
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/db_xref="taxon:9606"
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Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
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AV695187
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Chinese National Human Genome Center at Shanghai
351 Guo Shoujing Road, Zhangjiang Hi-Tech Park, Pudong, Shanghai
201203, P. R. China
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 417)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: hanzg@chgc.sh.cn
This clone is available at C
Location/Qualifiers
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 GATGCTGTCAAGGGGAAGTGCGTCCTCTTCCCCTACGGGGCTGCCAGGGCAACGGGAAC
                   AspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsn 41
                                                                                      AlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAlaPhe
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/db xref="reaxon:9606"
/clone="GKCBMC01"
/tissue_type="hapatocellular c.
/dev stage="Adult"
/lab_host="SOLR"
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RESULT 6
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RESULT 7
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AV682129
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Xu,X., Huang,J., Xu,Z., Qian,B., Zhu,Z., Yan,Q., Cai,T., Zhang,X., Xiao,H., Qu,J., Liu,F., Huang,Q., Cheng,Z., Li,N., Du,J., Hu,W., Shen,K., Lu,G., Fu,G., Zhong,M., Xu,S., Gu,W., Huang,W., Zhao,X., Hu,G., Gu,J., Chen,Z. and Han,Z.

Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tel: 86-21-50801919 (ex.45)
Fax: 86-21-50801922
Email: hanza@chgc.sh.cn
This clone is available at CHGC
Location/Qualifiers
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Chinese National Human Genome Center at Shanghai
351 Guo Shoujing Road, Zhangjiang Hi-Tech Park,
201203, P. R. China
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                              GATGCTGTCAAGGGGAAGTGCGTCCTCTTCCCCTACGGGGGCTGCCAGGGCAACGGGAAC
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/dev_stage="Adult"
/lab_host="SOLR"
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/db_xref="taxon:9606"
/clone="GKBAJE06"
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RESULT 8
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AI114613
        Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eukaryota; Metazoa; Chordata; Catarrhini; Hominidae;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
1 (bases 1 to 487)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Pro-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Department of Hematology
Beijing Institute of Radiation Medicine
27 Taiping Road, Beijing 100850, P.R.China
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mammalia; Eutheria; Primates; 1 (bases 1 to 450)
Yu.Y., Zhang,C., Luo,L., Ouvan, and He,F.
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                                                                                                                                   EST.
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Fax: 0086-10-68214653
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Tumor Gene Index
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                                                                                                                                                 AI246161.1
                                                                                                                                                                                  sequence.
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/lab_host="MC1061/P3"
/clome_lib="Human fetal liver cDNA library"
/note="Vector: pCDNA1"
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               Project (CGAP),
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JOURNAL COMMENT
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AUTHORS
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ORGANISM
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Query Match:
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AV720273/c
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                                                               TITLE
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                                                          Qian,B., Wu,T., Huang,Q., Huang,C., Kang,B., Gao,X., Xu,Z., Xiao,H., Xu,X., Li,N., Peng,Y., Liu,F., Qu,J., Song,H., Che Zeng,L., Xu,S., Gu,W., Tu,Y., Jia,J., Fu,G., Ren,S., Zhong, Lu,G., Yang,Y., Gu,Y., Chen,Z. and Han,Z.
                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 520)
                                                                                                                                                                                                                                                                                                        AV720273 GLC Homo sapiens cDNA clone GLCGBA03 AV720273
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Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This clone is available royalty-free through LLNL; IMAGE Consortium (info@image.llnl.gov) for further: Insert Length; 511 Std Error: 0.00
Contact: Zeguang Han
Chinese National Human Genome Center at Shanghai
                                       Unpublished (2000)
                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                     AV720273.1 GI:10817425
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unpublished (1997)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       LysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone_lib="Soares NhMPu_S1"
/note="Organ: mixed (see below); Vector: pT7T3D-Pac
/note="Organ: mixed (see below); Vector: pT7T3D-Pac
(Pharmacia) with a modified polylinker; Site_1: Not I;
Site_2: Eco RI; Equal amounts of plasmid DNA from three
normalized libraries (melanocyte 2NbHM, pregnant uterus
NbHPU, and fetal heart NbHH19W) were mixed, and ss circles
were made in vitro. Following HAP purification, this DNA
was used as tracer in a subtractive hybridization
reaction. The driver was PCR-amplified CDNAs from pools of
5,000 clones made from the same 3 libraries. The pools
consisted of I.M.A.G.B. clones 260232-265223,
340488-345479, and 484488-489479."
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pregnant uterus"
/lab_host="DH10B"
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db_xref="taxon:9606"
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89.97%
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103 5', mRNA sequence.
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Query Match:
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                                                                                   Insert Length: 1327 Std Brror:
Seq primer: -40UP from Gibco
High quality sequence stop: 410.
Location/Qualifiers
                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 525)

NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.

National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq31h04.x1
3' similar
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: hanzg@chgc.sh.cn
This clone is available at CHGC in Shanghai.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             351 Guo Shoujing Road, Zhangjiang Hi-Tech Park, Pudong, Shanghai 201203, P. R. China Tel: 86-21-50801919(ex.45)
Fax: 86-21-50801922
                                                                                                                                                                                                             Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
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EST.
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                                                                                                                                                                                                                                                  Tumor Gene Index
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                /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:1934167"
                                                organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /clone_lib="GLC"
/note="Vector: pBluescript sk(-); Site_1: EcoRI; Site_2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /tissue_type="corresponding non cancerous liver tissue"
/dev_stage="Adult"
/lab_host="SOLR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mol_type="mRNA"
/db_xref="taxon:9606"
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/mol_type="mRNA"
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Indels:
Gaps:
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Matches:
Conservative:
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Percent Similarity:
Best Local Similarity:
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I (bases I to 535)

Xu, X., Huang, J., Xu, Z., Qian, B., Zhu, Z., Yan, Q., Cai, T., Zhang, X., Xiao, H., Qu, J., Liu, F., Huang, Q., Cheng, Z., Li, N., Du, J., Hu, W., Shen, K., Lu, G., Fu, G., Zhong, M., Xu, S., Gu, W., Huang, W., Zhao, X., Hu, G., Gu, J., Chen, Z. and Han, Z.

Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
                                                                                                                                                                                                      Contact: Zeguang Han
Chinese National Human
351 Guo Shoujing Road,
201203, P. R. China
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
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AV654685.1 GI:9875699
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                                                                                                                                                                                   201203, P. R. China
Tel: 86-21-50801919(ex.45)
                                                                                                                                                           Fax: 86-21-50801922
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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//clone lib="Soares NhHMPu S1"
//note="Organ: mixed (see below); Vector: pT7T3D-Pac
//note="Organ: mixed (see below); Vector: pT7T3D-Pac
//pharmacia) with a modified polylinker; Site 1: Not I;
Site 2: Eco RI; Equal amounts of plasmid DNA from three
normalized libraries (melanocyte 2NbHM, pregnant uterus
NbHPU, and fetal heart NbHH19W) were mixed, and ss circles
were made in vitro. Following HAP purification, this DNA
was used as tracer in a subtractive hybridization
reaction. The driver was PCR-amplified cDNAs from pools of
5,000 clones made from the same 3 libraries. The pools
consisted of I.M.A.G.E. clones 260232-265223,
340488-345479, and 484488-489479."
                                                                                                        hanzg@chgc.sh.cn
lone is available at CHGC
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/organism="Homo sapiens"
/mol_type="mRNA"
                                                                             Location/Qualifiers
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Zhangjiang Hi-Tech Park,
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RESULT 11 AV654685 LOCUS

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337

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Query Match: DB:

ORIGIN

. No.:

SOURCE ORGANISM

VERSION ACCESSION DEFINITION

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REFERENCE

AUTHORS

COMMENT

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JOURNAL MEDLINE

TITLE

FEATURES

source

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RESULT 12
CB144250
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Best Local Similarity:
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1 (Dases 1 to 543)

Kim,N.S., Hahn,Y., Oh,J.H., Lee,J.Y., Ahn,H.Y., Chu,M.Y., Kim,M.R., Oh,K.J., Cheong,J.E., Sohn,H.Y., Kim,J.M., Park,H.S., Kim,S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CB144250 543 k
K-EST0199507 L7N80010281 Homo
5', mRNA sequence.
CB144250
                                                                                                                                                                                                                                                                                                                                                Tel: +82-42-860-4470
Fax: +82-42-860-4409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kim, Y.S.
21C Frontier Korean EST Project
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                                                                                                                                                                                                                                                               Email: yongsung@mail.kribb.re.kr
Plate: 22 row: F column: 06
High quality sequence stop: 543.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                   52 Eoeun-dong Yuseong-gu,
                                                                                                                                                                                                                                                                                                                                                                                     Korea Research Institute of Bioscience & Biotechnology 52 Eoeun-dong Yuseong-gu, Daejeon 305-333, South Korea
                                                                                                                                                                                                                                                                                                                                                                                                                            Genome Research Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Kim YS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAlaPhe
/note=Torgan: Liver; Vector: pCNS-D2; Site 1: EcoRI; Site 2: NotI; The poly (A)+ RNA was dephosphorylated with bacterial alkaline phosphatase (BAP) and then decapped with tabacco acid pyrophosphatase (TAP). The decapped intact mRNA was ligated with DNA-RNA linker including
                                                                                                                                                                                organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /tissue_type="corresponding non cancerous liver
/dev_stage="Adult"
/lab_host="SOLR"
                                                                                                   /lab_host="Top10F'"
/clone_lib="L7N800102s1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /clone_lib="GLC"
/note="Vector: pBluescript
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/clone="GLCDYD11"
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                                                                                                                                                                 clone="L7N80010281-22-F06"
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o sapiens cDNA clone L7N800102s1-22-F06
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RESULT 13
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                                                                      Genome Research Center
Korea Research Institute of Bioscience & Biotechnology
52 Boeun-dong Yuseong-gu, Daejeon 305-333, South Korea
                                                                                                                                                         21C Frontier Korean EST Project 2001
Unpublished (2002)
Contact: Kim YS
                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (Dases 1 to 543)

Kim,N.S., Hahn,Y., Oh,J.H., Lee,J.Y., Ahn,H.Y., Chu,M.Y., Kim,M.R.
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CB148803.1 GI:28131454
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K-EST0205202 L7N800102s1 Homo
                       Tel: +82-42-860-4470
Fax: +82-42-860-4409
                                                                                                                                                                                                                                                                         Kim, N.S., Hahn, Y., Oh, J.H., Oh, K.J., Cheong, J.E., Sohn,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAlaPhe
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yongsung@mail.kribb.re.kr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                remaining DNA into competent cells E. coli Top10F' with electroporation method."
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296.00
92.73%
92.73%
89.97%
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Conservative:
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o sapiens cDNA clone L7N800102s1-21-B07
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bate 2: NOLL; The poly (A) + KNA Was depinosynolylated with bacterial alkaline phosphatase (BAP) and then decapped intact mRNA was ligated with DNA-RNA linker including ECORI site by treatment of T4 RNA ligase and the first strand cDNA was synthesized from oligo dT-selected mRNA by priming with dT-tailed vector. The dT-tailed vector was adjusted to have about 60nt. The cDNA vector was adjusted to have about 60nt. The cDNA vector was adjusted to have about 60nt. The cDNA vector. An RNA strand converted to a DNA strand by Okayama-Berg method. The obtained cDNA vectors were used for transformation of competent cells E. coli ToplOF' by electroporation method. The cDNA libraries constructed by this method are full-length enriched cDNA library. After analyzing and sequencing about 2,000 - 3,000 colonies in original cDNA library, the abundant cDNAs were selected and amplified by PCR reaction using vector region primer including T7 promotor as 5' primer and N(dT)14 as 3' primer. The PCR products were used as template for synthesis of biotinylated single stranded cDNAs prepared from original liberary and incubated with avidin-gel. After removing DNA-RNA hybrids by centrifuge, the subtracted cDNA libraries were constructed by transformation of the remaining DNA into competent cells E. coli ToplOF' with electroporation method."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="Organ: Liver; Vector: pCNS-D2; Site_1: EcoRI; Site_2: NotI; The poly (A) + RNA was dephosphorylated with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
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ORIGIN

Alignment

ACCESSION VERSION KEYWORDS RESULT 14 AI193912/c LOCUS 片 S 밁 5 밁 S Percent Similarity:
Best Local Similarity:
Query Match: Score: US-10-038-722-27 (1-56) x CB148803 (1-543) DEFINITION Хо. : 379 439 42 22 AI193912 550 bp mRNA linear EST 29-OCT-1998 qe73b01.xl Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1744585 3' Similar to gb:X04225 ALPHA-1-MICROGLOBULIN AI193912 AI193912.1 (HUMAN);, mRNA sequence. LysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro GATGCTGTCAAGGGGAAGTGCGTCCTCTTCCCCTACGGGGGGCTGCCAGGGCAACGGGAAC AspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsn 41 AAGTTCTACTCAGAGAAGGAGTGCAGAGAGTACTGCGGTGTCCCT 483 3.46e-28 296.00 92.73% 92.73% 89.97% Conservative: Mismatches: Indels: Gaps: Length: Matches: 543 0 4 438 378 21

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RESULT 15
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                                                                                                                                                                   196
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                                                                                                                                                                                                                                                                                  2 AlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAlaPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                                                              sequence.
AI207590
AI207590.1 GI:6361600
                                                                                                    HA2954 Human
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unpublished (1997)
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National Cancer Institute, Cancer Genome Anat
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                     Homo sapiens (human)
                                                                                                                AI207590
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo gapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:1744585"
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Indels:
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US-10-038-722-27 (1-56) x AI207590 (1-571)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22 AspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsn 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (HUMAN);, mRNA sequence. AI336247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AI336247 583 bp mRNA linear EST 13-FEB-1999 qt45b07.x1 Soares fetal lung_NbHL19W Homo sapiens cDNA clone IMAGE:195091 3' similar to gb:x04225 ALPHA-1-MICROGLOBULIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Expression profile analysis of a human fetal liver cDNA library Unpublished (1998) Contact: Chenggang Zhang Beijing Institute of Radiation Medicine 27 Taiping Road, Beijing 100850, P.R.China Email: zhang chenggang@hotmail.com.
                                                                                                                                                                         Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

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IMAGE Consortium (info@image.llnl.gov) for further information.

Insert Length: 833 Std Error: 0.00
                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 583) NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap. NCI-CGAP introductional Cancer Institute, Cancer Genome Anatomy Project (CGAP), Mational Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                          Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
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                                                                                                                             primer: -40UP from Gibco
h quality sequence stop: 297.
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/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /lab_host="MC1061/P3"
/clone_lib="Human fetal liver cDNA library"
/note="Vector: pCDNA1"
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'dev_stage="fetal"
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AV683002
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Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N
                                                                                           Contact: Zeguang Han
Chinese National Human Genome Center at Shanghai
351 Guo Shoujing Road, Zhangjiang Hi-Tech Park, |
201203, P. R. China
Tel: 86-21-50801919 (ex.45)
                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AV683002.1 GI:10284865
                                    Email: hanzg@chgc.sh.cn
This clone is available at CHGC in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                            Fax: 86-21-50801922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsn 41
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GKCBBE06 5', mRNA sequence.
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                                                                                                                                   Shanghai
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Pred. No.:

밁

DEFINITION ACCESSION

AV683002 RESULT 17

Snoo

SOURCE

ORGANISM

KEYWORDS VERSION

REFERENCE

AUTHORS

FEATURES

/organism="Homo sapiens"

COMMENT

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: cgapbs-r@mail.nih.gov

Email: cgapbs-r@mail.nih.gov

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IMAGE Consortium (info@image.llnl.gov) for further information.

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AI807643
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1 (bases 1 to 644)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tumor Gene Index
Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
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Seq primer: -40UP from Gibco
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       quality sequence stop: 4
/Clone="IMAGE:2338919"
/(clone="IMAGE:238919"
/(clone=lib="Soarse_NFL T_GBC_S1"
/(clone=lib="Soarse_NFL T_GBC_S1"
/note="Torgan: pooled; Vector: pT7T3D-Pac (pharmacia) with a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I; Site 2: Eco RI; a modified polylinker; Site 1: Not I;
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/tissue_type="hepatocellular carcinoma"
/dev_stage="Adult"
/lab_host="SOLR"
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note="Vector: pBluescript sk(-); Site_1: EcoRI; Site_2:
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db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                          mol_type="mRNA"
db_xref="taxon:9606"
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1 (bases 1 to 670)

Xu,X., Huang,J., Xu,Z., Qian,B., Zhu,Z., Yan,Q., Cai,T., Zhang,X., Xiao,H., Qu,J., Liu,F., Huang,Q., Cheng,Z., Li,N., Du,J., Hu,W., Shen,K., Lu,G., Fu,G., Zhong,M., Xu,S., Gu,W., Huang,W., Zhao,X., Hu,G., Gu,J., Chen,Z. and Han,Z.

Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
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                                                                                                                                                                                                                                                                                                                                              Contact: Zeguang Han
Chinese National Human
351 Guo Shoujing Road,
201203, P. R. China
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                                                                                                                                                                                                                                                                                                          Tel: 86-21-50801919(ex.45) Fax: 86-21-50801922
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                                                                                                                                                                                                                                                                  clone
                                                                                                                                                                                                                                        hanzg@chgc.sh.cn
lone is available at CHGC in
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        was PCR-amplified cDNAs from pools of 5,000 clones made from the same 3 libraries. The pools consisted of I.M.A.G.E. clones 297480-302087, 682632-687239, 726408-728711, and 729096-731399. Subtraction by Bento Soares and M. Fatima Bonaldo. "
                                                                          /tissue_type="hepatocellular
/dev_stage="Adult"
/lab_host="SOLR"
                                      /note="Vector: pBluescript sk(-); Site_1: EcoRI; Site_2:
                                                                                                                                         /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="GKCBNF08"
                                                             clone_
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Road, Zhangjiang Hi-Tech Park,
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ne GKCBNF08 5', mRNA sequence.
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AW173259
AW173259.1 GI:6439207
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
This clone is available royalty-free through LLNL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tumor Gene Index
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National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IMAGE Consortium (info@image.llnl.gov) for further information.
Seq primer: -40UP from Gibco
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/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:2664014"
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Chinese National Human Genome Center at Shanghai
Chinese Shouiing Road, Zhangjiang Hi-Tech Park,
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Xu,X., Huang,J., Xu,Z., Qian,B., Zhu,Z., Yan,Q., Cai,T., Zhang,X., Xiao,H., Qu,J., Liu,F., Huang,Q., Cheng,Z., Li,N., Du,J., Hu,W., Shen,K., Lu,G., Fu,G., Zhong,M., Xu,S., Gu,W., Huang,W., Zhao,X., Hu,G., Gu,J., Chen,Z. and Han,Z.

Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver with those of corresponding noncancerous liver proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
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351 Guo Shoujing Koad, Zha
201203, P. R. China
Tel: 86-21-50801919 (ex.45)
Fax: 86-21-50801922
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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AlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAlaPhe
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                                                                                                                                                                                                                                                                                                                                                                                                                                                l: hanzg@chgc.sh.cn
clone is available at CHGC
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GKC Homo sapiens cDNA clone
                                                                                                                                                                                                                                           /note="Vector: pBluescript sk(-); Site_1: XhoI"
                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens
/mol_type="mRNA"
/db_xref="taxon:9606"
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/dev_stage="Adult"
                                                                                                                                                                                                                                                                                                                                          clone="GKCBNF09"
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Chinese National Human Genome Center at Shanghai
Pan Guo Shoujing Road, Zhangjiang Hi-Tech Park,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 683)

Xu,X., Huang,J., Xu,Z., Qian,B., Zhu,Z., Yan,Q., Cai,T., Zhang,X.,
Xiao,H., Qu,J., Liu,F., Huang,Q., Cheng,Z., Li.N., Du,J., Hu,W.,
Shen,K., Lu,G., Pu,G., Zhong,M., Xu,S., Gu,W., Huang,W., Zhao,X.,
Hu,G., Gu,J., Chen,Z. and Han,Z.
Insight into hepatocellular carcinogenesis at transcriptome level
by comparing gene expression profiles of hepatocellular carcinoma
with those of corresponding noncancerous liver
proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
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Tel: 86-21-50801919(ex.45)
Fax: 86-21-50801922
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Email: hanzg@chgc.sh.cn
This clone is available at CHGC
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                                                         AspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsn 41
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                                                                                                                                                                                                                                                                                                                                                                                                                /tissue_type="corresponding
/dev_stage="Adult"
/lab_host="SOLR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
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                                                                                                                                                                                                                                                                                                                                                                             clone_lib="GLA"
note="Vector: pl
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RESULT 24
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Xu, X., Huang, J., Xu, Z., Qian, B., Zhu, Z., Yan, Q., Cai, T., Zhang, X., Xiao, H., Qu, J., Liu, F., Huang, Q., Cheng, Z., Li, N., Du, J., Hu, W., Shen, K., Lu, G., Fu, G., Zhong, M., Xu, S., Gu, W., Huang, W., Zhao, X., Hu, G., Gu, J., Chen, Z. and Han, Z.

Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001)
                                                                                                                                                                                                             2 AlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAlaPhe
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AV700236 GKC Homo sapie:
AV700236
AV700236.1 GI:10302207
AV645372 GLA Homo sapiens cDNA clone GLAAAF01 3',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tel: 86-21-50801919(ex.45)
Fax: 86-21-50801922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Zeguang Han
Chinese National Human Genome Center at Shanghai
351 Guo Shoujing Road, Zhangjiang Hi-Tech Park,
201203, P. R. China
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                        LysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hanzg@chgc.sh.cn
lone is available at CHGC
Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                  /note="Vector: pBluescript sk(-); Site_1: EcoRI; Site_XhoI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                             /tissue_type="hepatocellular
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/lab_host="SOLR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          clone="GKCERD11"
                                                                                                                                                                                                                                                                                               4.66e-28
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D11 3', mRNA sequence.
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mRNA sequence.
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BU689265/c
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Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver Proc. Natl. Acad. Sci. U.S.A. 98 (26), 15089-15094 (2001) 21625106
                                                                        BU689265 692 bp mRNA linear UI-CF-EC1-adw-b-01-0-UI.S1 UI-CF-EC1 Homo sapiens UI-CF-EC1-adw-b-01-0-UI.3', mRNA sequence.
BU689265
BU689265.1 GI:23546865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Zeguang Han
Chinese National Human Genome Center at Shanghai
351 Guo Shoujing Road, Zhangjiang Hi-Tech Park,
201203, P. R. China
Tel: 86-21-50801919 (ex.45)
Fax: 86-21-50801922
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AV645372.1 GI:9866386
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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1 (bases 1 to 692)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: hanzg@chgc.sh.cn
This clone is available at CHGC
                                                                                                                                                                                                                                                             LysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro
                                                                                                                                                                                                                                                                                                                                       AspAlaVallysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsn 41
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                                                                                                                                                                                                                                       AAGTTCTACTCAGAGAAGGAGTGCAGAGAGTACTGCGGTGTCCCT
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/note="Vector: pBluescript sk(-); Site_1:
XhoI"
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/dev_stage="Adult"
/lab_host="SOLR"
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/db_xref="taxon:9606"
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  271
                                    22 AspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsn 41
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Tissue Procurement: Dr. M. J. Welsh, University of Iowa
cDNA Library preparation: Dr. M. Bento Soares, University of Iowa
cDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: Researchers may obtain clones from Research
Genetics (www.resgen.com) or from Open Biosystems
(www.openbiosystems.com).
Seq primer: M13 FORWARD
POLYA=Yes.
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1 (bases 1 to 692)
Bonaldo, M.F., Lennon, G. and Soares, M.B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     University of Iowa
2024 University of Iowa Med Labs, Iowa City, IA 52242,
Tel: 319 356 4866
Fax: 319 356 7171
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Normalization and subtraction: two approaches to facilitate gene
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                                                                                                                           AlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAlaPhe 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /notes Torgan: Lung; Vector: pT7T3-Pac (Pharmacia) with a modified polylinker; Site 1: EcoR I; Site 2: Not I; UI-CF-ECI is a normalized CDNA library containing the following tissue(s): Normal lung from adult and from fetal day 64, day 87, week 19 and week 42. The library was constructed according to Bonaldo, Lennon and Soares, Genome Research, 6:791-806, 1996. First strand cDNA synthesis was primed with an oligo-dT primer containing a Not I site. Double stranded cDNA was ligated to an EcoR I adaptor, digested with Not I, and cloned directionally into pT7T3-Pac vector. The oligonucleotide used to prime the synthesis of first-strand cDNA contains a library tag sequence that is located between the Not I site and the (dT)18 tail. The sequence tag for this library is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAG_TISSUE=Normal Lung Epithelial Cells Tissue nos 369-371 and 380-383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAG_SEQ=AAGTGCTTAC"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /tissue_type="Lung"
/dev_stage="Adult and Fetal"
/dev_stage="Adult and Fetal"
/lab_host="DH1OB (Life Technologies) (T1 phage resistant)"
/clone_lib="UI-CF-EC1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TAG_LIB=UI-CF-EC1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /db_xref="taxon:9606"
/clone="UI-CF-EC1-adw-b-01-0-UI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              organism="Homo sapiens"
|mol_type="mRNA"
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296.00
92.73%
92.73%
89.97%
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Matches:
Conservative:
Mismatches:
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212
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211	42
211 AAGTTCTACTCAGAGAAGGAGTGCAGAGAGTACTGCGGTGTCCCT 167	42 LysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56
167	56

Search completed: February 23, 2005, 06:02:16 Job time: 2307 secs

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Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -MODEL-frame+ p2n.model -DEV=xlh
-Q=/cgn2 1/USPTO_spool/US10038722/runat_18022005_145236_14347/app_query.fasta_1.199
-Q=/cgn2 1/USPTO_spool/US10038722/runat_18022005_145236_14347/app_query.fasta_1.199
-DB=18sued_Patente NA -QFMT=fastap -SUFFIX=rni -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bite -STRART=1 -END=-1 -MATRIX=blosum62 -TRANS=buman40:cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=25
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-USER-US10038722_@CGN 1 177_@runat_18022005_145236_14347 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQÜERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimum DB seq
Maximum DB seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Scoring table:
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                                                                                                                                                                                                                         Score
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length: 2000000000
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1: /cgn2_6/ptcdata/1/ina/5A_COMB.seq:*
2: /cgn2_6/ptcdata/1/ina/5B_COMB.seq:*
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5: /cgn2_6/ptcdata/1/ina/FCTUS COMB.seq:*
6: /cgn2_6/ptcdata/1/ina/backfiles1.seq:*
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Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
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              US-08-358-160-68
US-08-358-160-70
US-08-358-160-70
US-07-791-213D-12
US-08-293-150A-12
US-09-331-793-72
US-09-331-793-71
US-07-791-213D-15
US-07-791-213D-11
US-07-791-213D-11
US-07-792-387-74
US-08-431-412-74
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IS-08-293-150A-88	-057-971-	-08-431-41	-387-	-07-791-213D-8	-08-293-150A-1	-07-791-213D-	-09-101-2	25-243A-	-09-101-272G-1	-101-272G-	-08-057-971-	31-412-	-07-972-	-101-272G-9	-09-101-272G-	-09-101-272G-7	-09-331-793-2	-08-293-150A-9	-791-213D-	57-971-	-08-431-412	-972-387-	-057-971-	1-412-	72-387-	35-515A-2	-08-293-150A-	91-213D-7	8-293-150A-8	-07-791-213D-8	-08-235-515A-2
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ALIGNMENTS

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US-08-358-160-68
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GENERAL INFORMATION:
                                                                         COMPUTER SAFETY AND ASSESSED TO SEE THE SECONDUTER: IBM PC COMPATIBLE COMPUTER: IBM PC COMPATIBLE COMPUTER: PATENTIN PC-DOS/MS-DOS SOFTWARE: PATENTIN Release #1.0, Verent Repulcation Data: APPLICATION NUMBER: US/08/358,160 FILLING DATE: 16-DEC-1994 CLASSIFICATION 514 PRIOR APPLICATION DATA: APPLICATION UNMBER: US 08/133,031 APPLICATION UNMBER: US 08/133,031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
                      APPLICATION NUMBER: US 01
FILING DATE: 13-OCT-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 01
                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: ENGINEERED HUMAN-DERIVED KUNITZ
TITLE OF INVENTION: DOMAINS THAT INHIBIT HUMAN NEUTROPHIL ELASTASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: BROWDY AND NEIMARK
STREET: 419 Seventh Street, N.W. Suite
CITY: Washington
                                                                                                                                                                                                                                                                                                                   ZIP: 20004
                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                             STATE: District of Columbia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application
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ROBERTS, Bruce L.
MARKLAND, William
KENT, Rachel B.
                                                                                                                                                                                                                                                                                                                                           USA
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LADNER, Robert C.
26-JAN-1993
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                      US 08/009,319
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PRIOR APPLICATION DATA:

APPLICATION NUMBER: FILING DATE: 01-MAF

01-MAR-1991

US 07/664,989

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Best Local Similarity:
Query Match:
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Pred. No.:
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                                                                                                                                                                                                                                                                                                                   Sequence 66, Application Patent No. 5663143
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: COOPER, IVER P.
REGISTRATION NUMBER: 28,005
REFERENCE/DOCKET NUMBER: LEY=
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-628-5197
TELEPAX: 202-737-3528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEX: 248633
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: 1i
MOLECULE TYPE:
DESCRIPTION:
                                                                                                                                            APPLICANT: LEY, Arthur C.
APPLICANT: LADNER, Robert C.
APPLICANT: GUTERMAN, Sonia K.
APPLICANT: ROBERTS, Bruce L.
APPLICANT: MARKLAND, William
APPLICANT: KENT, Rachel B.
TITLE OF INVENTION: ENGINEERED HUMAN-DERIVED KUNITZ
TITLE OF INVENTION: DOWAINS THAT INHIBIT HUMAN NEUTROPHIL ELASTASE
NUMBER OF SEQUENCES: 234
CORRESPONDENCE ADDRESS:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 02-SEP-1988
ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER: |
FILING DATE: 02-MAR-
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STRANDEDNESS: single
                                                                                 CITY: Washington
STATE: District o
                                                     ZIP: 20004
                                                                 COUNTRY:
                                                                                                                   STREET:
                                                                                                                                      ADDRESSEE:
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                                                                                                              419 Seventh Street, N.W. Suite 300
                                                                     USA
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                                                                                                                                     BROWDY AND NEIMARK
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02-MAR-1990
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synthetic DNA fragment
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                                                                                                                                                                                                                                                                                                                                                                                              US-10-038-722-27 (1-56) x US-08-358-160-66 (1-8584)
                                                                                                                           Sequence 70, Application US/08358160 Patent No. 5663143
                                                                                                                          Patent No.
                                                                        GENERAL INFORMATION:
APPLICANT: LEY, Arthur C.
APPLICANT: LADNER, Robert C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEX: 248633
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             . No.:
                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: ci
MOLECULE TYPE:
DESCRIPTION:
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FILING DATE: 02-MAR-
PRIOR APPLICATION DATA:
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APPLICATION NUMBER: US
FILING DATE: 16-DEC-19
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-628-5197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 07/240,160 FILING DATE: 02-SEP-1988 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 26-JAN-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/664,989
FILING DATE: 01-MAR-1991
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APPLICATION NUMBER: 1
                             APPLICANT:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 248633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 8584 bases
TYPE: nucleic acid
STRANDEDNESS: sing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: 204 - TELEPHONE: 202-737-3528
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
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              GUTERMAN, Sonia K.
ROBERTS, Bruce L.
MARKLAND, William
KENT, Rachel B.
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ENGINEERED HUMAN-DERIVED KUNITZ
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Matches:
Conservative:
Mismatches:
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Query Match:
DB:
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Best Local Similarity:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 8590 bases
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MOLECULE TYPE:
DESCRIPTION:
                                                                                                                                                                                                                                                                                                                                                No.:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/133,031
FILLING DATE: 13-OCT-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
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FILING DATE: 02-SEP-1988
ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
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TELEFAX: 202-737-3528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Cooper, Iver P. REGISTRATION NUMBER: 28, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 0: FILING DATE: 26-JAN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/0: FILING DATE: 16-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COPERATING SYSTEM: PC-DOS/MS-DOS
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                          LysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56
                                                                                             AspAlaVallysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsn 41
                                                                                                                                                                   AlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAlaPhe
AAGTTCTACTCTGAGAAGGAGTGTAGAGAGTACTGTGGTGTTCCA 1376
                                                                                                                                              GCTTGTAACTTGCCAATCGTCAGAGGTCCATGCATTGCTTTCTTCCCAAGATGGGCTTTC
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419 Seventh Street, N.W. Suite 300
                                                                                                                                                                                                                                                                                                                                                                                                                 circular
E: other nucleic acid
N: DNA plasmid
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Matches:
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Sequence 12, Application US/08293150A

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Percent Similarity:
Best Local Similarity:
Query Match:
RESULT 5
US-08-293-150A-12
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US-07-791-213D-12
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MEDIUM TYPE: Ploppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, V

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/07/791,213D

FILING DATE: 13-NOV-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (703) 836-20
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 2-306745
FILING DATE: 13-NOV-1990
ATTORNEY/AGENT INFORMATION:
NAME: Meuth, Donna M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 198 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
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TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: ....STRANDEDNESS: 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REGISTRATION NUMBER: 36,607
REFERENCE/DOCKET NUMBER: 02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: nucleic acid
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                                                                     LysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro
                                                 AAGTTCTACTCAGAGAAGGAGTGCAGAGAGTACTGCGGTGTCCCT 174
                                                                                                                GATGCTGTCAAGGGGAAGTGCGTCCTCTTCCCCTACGGGGGCTGCCAGGGCAACGGGAAC
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Matches:
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Indels:
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METHODS OF
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Percent Similarity:
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Query Match:
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; Sequence 27, Application US/09331793
                   RESULT 6
US-09-331-793-27
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ATTORNEY/AGENT INFORMATION:
NAME: Meuth, Donna M.
REGISTRATION NUMBER: 36,607
REFERENCE/DOCKET NUMBER: 029650-049
REFERENCE/DOCKET NUMBER: 029650-049
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
TELEPHONE: (703) 836-2021
INFORMATION FOR SEQ ID NO: 12:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: Patentin Release #1.0, Version #1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/293,150A
FILING DATE: 19-AUG-1994
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/791,213
APPLICATION NUMBER: US 07/791,213
FILING DATE: 13-NOV-1990
PRIOR APPLICATION NUMBER: JP 2-306745
APPLICATION NUMBER: JP 2-306745
APPLICATION NUMBER: JP 2-306745
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APPLICANT: KANAMORI, TOSHINORI
APPLICANT: NOBUHARA, MASSHITO
TITLE OF INVENTION: POLLYPEPTIDE, DNA FRAGMENT ENCODING THE
TITLE OF INVENTION: SAME AND PROCESS FOR PRODUCING THE SAME,
TITLE OF INVENTION: INHIBITION PROCESS, DRUG COMPOSITION AND
TITLE OF INVENTION: TREATING USING THE SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: 1:
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ADDRESSEE: BURNS, DO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 198 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                130 AAGTTCTACTCAGAGAAGGAGTGCAGAGAGTACTGCGGTGTCCCT 174
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P.O. Box 1404
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APPLICANT: KURIYAMA, Shinichi
APPLICANT: HASEGAWA, Takashi
TITLE OF INVENTION: CELL MEMBRANE DIRECTED DRUGS
FILE REFERENCE: 1110-253P
CURRENT APPLICATION NUMBER: US/09/331,793
CURRENT FILING DATE: 1999-06-25
IUMBER OF SEQ ID NOS: 67
SOFTWARE: PatentIn version 3.0
SEQ ID NO 27
LENGTH: 204
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Query Match:
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; ORGANISM: Homo
US-09-331-793-27
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GENERAL INFORMATION:
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GENERAL INFORMATION:
                                                 COMPUTER READALL FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC COMPATIBLE
COMPUTER: IEM PC COMPATIBLE
COMPUTER: IEM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN BATA:
SOFTWARE: PATENTIN BATA:
APPLICATION NUMBER: US/07/791,213D
FILING DATE: 13-NOV-1991
CLASSIFICATION DATA:
APPLICATION DATA:
APPLI
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APPLICANT: KANAMORI, Toshinori
APPLICANT: NOBUHARA, Masahiro
TITLE OF INVENTION: POLYPEPTIDE, DNA FRAGMENT ENCODING THE
TITLE OF INVENTION: SAME AND PROCESS FOR PRODUCING THE SAME,
TITLE OF INVENTION: INHIBITION PROCESS, DRUG COMPOSITION AND
TITLE OF INVENTION: TREATING USING THE SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
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REGISTRATION NUMBER:
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P.O. Box 1404
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Indels:
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REFERENCE/DOCKET NUMBER: 02
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
TELEFAX: (703) 836-2021

029650-032

836-2021

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RESULT 8
US-08-293-150A-15
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Best Local Similarity:
Query Match:
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          COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/293,150A
PILING DATE: 19-AUG-1994
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/791,213
FILING DATE: 13-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: UF 2-306745
FILING DATE: 13-NOV-1990
ATTORNEY/AGENT INFORWATION:
NAME: Meuth, Donna M.
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 209 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: MORISHITA
APPLICANT: KANAMORI,
APPLICANT: NOBUHARA,
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
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MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
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REGISTRATION NUMBER:
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Matches:
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Indels:
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METHODS OF
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TELEPAX: (703)
TELEPAX: (703)
INFORMATION FOR SEQ ID NO: 15
SEQUENCE CHARACTERISTICS:
LEENGTH: 209 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
TNB (Genom
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Query Match:
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                                                                                                                                                            STATE: Virginia
COUNTRY: United States
ZIP: 22313-1404
ZIP: 22313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ve
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/791,213D
FILING DATE: 13-NOV-1991
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 2-306745
PILING DATE: 13-NOV-1990
ATTORNEY/AGENT INFORMATION:
NAME: Meuth, Donna M
REGISTRATION NUMBER: 36,607
REFERENCE/DOCKET NUMBER: 029650-0
TELECOMMUNICATION INFORMATION:
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APPLICANT: KANAMORI,
APPLICANT: KOUHARA,
TITLE OF INVENTION: S
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TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                              108
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                      029650-032
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Indels:
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Matches:
Conservative:
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(703) 836-2021

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Best Local Similarity:
Query Match:
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; TOPOLOGY: lin
; MOLECULE TYPE:
US-07-791-213D-11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: MUIDLY Jr., Gerald M.
REGISTRATION NUMBER: 28,977
REFERENCE/DOCKET NUMBER: 1110-124P
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-241-1300
TELEPHONE: 703-241-2848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                     NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Morishita, Hideaki
APPLICANT: Kanamori, Toshinori
APPLICANT: No. 5451659uhara, Massahiro
TITLE OF INVENTION: Polypeptide, DNA Fragment Encoding the
TITLE OF INVENTION: Same, Drug Composition Containing the Same
TITLE OF INVENTION: Producing the Same
                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
         SEQUENCE CHARACTERISTICS:
LENGTH: 210 base pairs
TYPE: NUCLEIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
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                                                                     TELEFAX: ,...
TELEFAX: ,...
248345
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STREET: 301 N. Washington St.
CITY: Falls Church
                                                                                                                                                                                                                                                   APPLICATION NUMBER: UPFILING DATE: 19921105
                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
ZIP: 22046-0747
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STRANDEDNESS:
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EDNESS: single
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Best Local Similarity:
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COMPUTER READALE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTTWARE: PATENTIN Release #1.0, Version #1.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/431,412
FILING DATE: 28-PR-1995
CLASSIFICATION DATB: US 07/972,387
APPLICATION NUMBER: US 07/972,387
APPLICATION NUMBER: US 07/972,387
APPLICATION NUMBER: 05-NOV-1992
ATTORNEY/AGENT INFORMATION:
NAME: MULTPHY JT., Gerald M.
REGISTRATION NUMBER: 28,977
REFERENCE/DOCKET NUMBER: 1110-124P
TELECOMMUNICATION INFORMATION:
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HYPOTHETICAL: N
ANTI-SENSE: NO
FEATURE:
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TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
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STATE: Virginia
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OTHER INFORMATION:
OTHER INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                      Kanamori, Tosniuci
No. 5589360uhara, Masahiro
NO. Polypeptide, DNA Fragment Encoding the
NVENTION: Same, Drug Composition Containing the Same and Process
NVENTION: Producing the Same
                                                                                                                                                                                                                                                                                                                   USA
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296.00
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92.73%
89.97%
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Matches:
Conservative:
Mismatches:
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Gaps:
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RESULT 12
US-08-057-971-74
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Best Local Similarity:
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                                                                                                                                                                                                                                                                                                          APPLICANT: Morishita, Hideaki
APPLICANT: Kanamori, Toshinori
APPLICANT: Kanamori, Toshinori
APPLICANT: No. 5679770uhara, Masahiro
TITLE OF INVENTION: Polypeptide, DNA Fragment Encoding the
TITLE OF INVENTION: Same, Drug Composition Containing the Same and Process for
TITLE OF INVENTION: Producing the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         . No. :
              SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/057,971
FILING DATE: 06-MAY-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
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                                                                                                              MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                   ADDRESSEE: Birch, Stewart, Kolasch & Birch
STREET: P.O. Box 747
CITY: Falls Church
STATE: Virginia
COUNTRY: USA
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OTHER INFORMATION:
OTHER INFORMATION:
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LOCATION:
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Murphy Jr., Gerald M.
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296.00
92.73%
92.73%
89.97%
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/note= "encodes TN70 polypeptide"
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Matches:
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Best Local Similarity:
Query Match:
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                                                                                                                                                                                                                                                                                                                                                                      Patent No.
                                                                                                                                                                                                                                                                                                                                                                                    Sequence 11, Application US/08293150A
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                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                  TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
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APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE:
HYPOTHETICAL: N
ANTI-SENSE: NO
                                                        ZIP: 22313-1404
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                               NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION: TELEPHONE: 703-205-8000
          MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Palantin
                                                                                                                                 CITY: Alexandria
STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCATION: 1..210
OTHER INFORMATION:
OTHER INFORMATION:
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                                                                                                              COUNTRY:
                                                                                                                                                               ADDRESSEE: BURNS, DOA
STREET: P.O. Box 1404
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER: 28,977
                                                                                                                                                                                                                                                                                                                                                                                                                                                          130 AAGTTCTACTCAGAGAAGGAGTGCAGAGAGTACTGCGGTGTCCCT 174
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                                                                                                22313-1404
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                                                                                                                Virginia
7: United States
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NOBUHARA, MASSAİIRO
IVENTION: POLYPEPTIDE, DNA FRAGMENT ENCODING THE
SAME AND PROCESS FOR PRODUCING THE SAME,
NVENTION: INHIBITION PROCESS, DRUG COMPOSITION AND
NVENTION: TREATING USING THE SAME
                                                                                                                                                                                                                                                                                                                                      MORISHITA, Hideaki
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296.00
92.73%
92.73%
89.97%
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Matches:
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Indels:
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                 Version #1.25
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METHODS OF
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APPLICATION NUMBER: US/08/293,150A

19-AUG-1994

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RESULT 14
US-08-235-515A-24
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Best Local Similarity:
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                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Morishi
APPLICANT: Kanamor
APPLICANT: No. 584
                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 24,
Patent No. 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (703) 836-2021
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 210 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 13-NOV-1990
ATTORNEY/AGENT INFORMATION:
NAME: Meuch, Donna M.
REGISTRATION NUMBER: 36,607
REFERENCE/DOCKET NUMBER: 0296
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Birch, Stev
STREET: P.O. Box 747
CITY: Falls Church
STATE: Virginia
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PRIOR APPLICATION UDBER: US 07/791,213
FILING DATE: 13-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: UP 2-306745
                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                               APPLICANT: Morishita, Hideaki
APPLICANT: Kanamori, Toshinori
APPLICANT: No. 5840518hara, Masahiro
TITLE OF INVENTION: DNA FRAGMENT, VECTOR CONTAINING THE DNA
TITLE OF INVENTION: FRAGMENT, TRANSFORMANT TRANSFORMED WITH
TITLE OF INVENTION: PROCESS FOR PRODUCING PROTEIN USING THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE:
                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
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TYPE: nucleic acid
                                                                                                                                                        COUNTRY:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            130
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5840518
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296.00
92.73%
92.73%
89.97%
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US/08/235,515A
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Matches:
Conservative:
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Indels:
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Percent Similarity:
Best Local Similarity:
Query Match:
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US-07-791-213D-85
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                                                                                                                                                                                                                                                                                Patent No. 5409895
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                    Sequence 85, Application US/07791213D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 703-205-8050
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 210 base pairs
TYPE: nucleic scid
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REFERENCE/DOCKET NUMBER: 11
TELECOMMUNICATION INFORMATION:
TELBEHONE: 703-205-8000
TELEPAX: 703-205-8050
                                                                                                                                                     APPLICANT: MORISHITA, Hideaki
APPLICANT: KANAMORI, Toshinori
APPLICANT: NOBUHARA, Masahiro
RITLE OF INVENTION: POLYPEPTIDE, DNA FRAGMENT ENCODING THE
RITLE OF INVENTION: SAME AND PROCESS FOR PRODUCING THE SAME,
RITLE OF INVENTION: INHIBITION PROCESS, DRUG COMPOSITION AND
RITLE OF INVENTION: TREATING USING THE SAME
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NAME: Murphy Jr., Gerald M.
COMPUTER READABLE FORM:
                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: 1..210
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
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                                                                                                                                          NUMBER OF SEQUENCES:
                                                            STREET: P.O. Box
CITY: Alexandria
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CLASSIFICATION:
                COUNTRY: United States ZIP: 22313-1404
                                                   STATE:
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                                                                                                   ADDRESSEE:
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                                              Virginia
                                                                                    E: Burns, Doa
P.O. Box 1404
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296.00
92.73%
92.73%
89.97%
                                                                                                     Doane,
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/note= "Formula 24, encodes a portion of E. col.
alkaline phosphatase downstream from the signal
peptide."
                                                                                                                                          108
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E. coli alkaline phosphatase"
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                                                                                                       Swecker & Mathis
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Matches:
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MEDIUM TYPE: COMPUTER: I

Floppy disk

Floppy disk

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US-08-293-150A-85
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Best Local Similarity:
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SEQUENCE CHARACTERISTICS:
LENGTH: 295 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                       Patent No.
                                                                                                                            GENERAL INFORMATION:

APPLICANT: MORISHITA, Hideaki

APPLICANT: KANAMORI, Toshinori

APPLICANT: NOBUHARA, Masahiro

TITLE OF INVENTION: POLYPEPTIDE, DNA FRAGMENT ENCODING THE

TITLE OF INVENTION: SAME AND PROCESS FOR PRODUCING THE SAME,

TITLE OF INVENTION: INHIBITION PROCESS, DRUG COMPOSITION AND

TITLE OF INVENTION: TREATING USING THE SAME

NUMBER OF SEQUENCES: 110

CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: JF 2-306745
FILING DATE: 13-NOV-1990
ATTORNEY/AGENT INFORMATION:
NAME: Meuth, Donna M
REGISTRATION NUMBER: 36,607
REFERENCE/DOCKET NUMBER: 029650-032
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/791,213D
FILING DATE: 13-NOV-1991
CLASSIFICATION: 435
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COMPUTER READABLE FORM
                                                 ADDRESSEE: BURNS, DOANE, STREET: P.O. Box 1404 CITY: Alexandria STATE: Virginia
                  COUNTRY: United States 
ZIP: 22313-1404
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LOCATION: 27..290
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                                                                                                                                                                                                                                                                                                                      3 85, 25, No. 5792629
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                                                                                                                                                                                                                                                                                                                                                                                                                                        219 AAGTTCTACTCAGAGAAGGAGTGCAGAGAGTACTGCGGTGTCCCT 263
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Matches:
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Indels:
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METHODS OF
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PATENT NO. 540895
PATENT NO. 540895
PATENT NFORMATION:
APPLICANT: KANAMORI, Toshinori
APPLICANT: KOBULARA, Masahiro
APPLICANT: NOBULARA, Masahiro
ITITLE OF INVENTION: SAME AND PR
TITLE OF INVENTION: INHIBITION
ITITLE OF INVENTION: TREATING US
NUMBER OF SEQUENCES: 108
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
SWEET
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Best Local Similarity:
Query Match:
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                                                                                                                                                                                                                                                                                Sequence 75, Application US/07791213D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (703) 836-202
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: DNA (genomic) FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARB: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/791,213
FILING DATE: 13-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 2-306745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION: TELEPHONE: (703) 836-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 13-NOV-1990
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY:
LOCATION:
ADDRESSEE: Burns, Doane, STREET: P.O. Box 1404 CITY: Alexandria STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Meuth, Donna M.
REGISTRATION NUMBER: 36,607
REFERENCE/DOCKET NUMBER: 02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/08/293,150A FILING DATE: 19-AUG-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE:
COMPUTER: IF
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NOBUHARA, Masahiro
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296.00
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92.73%
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                                                                                                               POLYPEPTIDE, DNA FRAGMENT ENCODING THE SAME AND PROCESS FOR PRODUCING THE SAME, INHIBITION PROCESS, DRUG COMPOSITION AND TREATING USING THE SAME
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Matches:
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COMPUTER READABLE FORM: MEDIUM TYPE: Floppy

Floppy disk

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Best Local Similarity:
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                                                                                                                                                                                                                                Sequence 75, Application US/08293150A Patent No. 5792629
                                                                                                                                                                                                                GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 13-NOV-1990
ATTORNEY/AGENT INFORMATION:
NAME: MEUCH, Donna M
REGISTRATION NUMBER: 36,607
REFERENCE/DOCKET NUMBER: 0296
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 836-6620
                                                                                                                                                      APPLICANT:
APPLICANT:
APPLICANT:
                                                                APPLICANT: KANAMORI, TOSHINORI
APPLICANT: NOBUHARA, MSSAHIRO
TITLE OF INVENTION: POLYPEPTIDE, DNA FRAGMENT ENCODING THE
TITLE OF INVENTION: SAME AND PROCESS FOR PRODUCING THE SAME,
TITLE OF INVENTION: INTESTION PROCESS, DRUG COMPOSITION AND
TITLE OF INVENTION: TREATING USING THE SAME
NUMBER OF SEQUENCES: 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 313 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    No.:
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LOCATION: 27..303
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OPERATING SYSTEM: PC-DOS/MS-DOS
                       STREET:
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                                       ADDRESSEE:
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P.O. Box 1404
Alexandria
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Matches:
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Indels:
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Percent Similarity:
Best Local Similarity:
Query Match:
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US-08-235-515A-28
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                                                                                                                                                                                   Sequence 28, Application US/08235515A Patent No. 5840518
                                                    GENERAL INFORMATION:

APPLICANT: Morishita, Hideaki
APPLICANT: Morishita, Toshinori

APPLICANT: Kanamori, Toshinori

APPLICANT: No. 5840518uhara, Masahiro

TITLE OF INVENTION: FRAGMENT, VECTOR CONTAINING THE DNA

TITLE OF INVENTION: PROCESS FOR PRODUCING PROTEIN USING THE

TITLE OF INVENTION: PROCESS FOR PRODUCING PROTEIN USING THE
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FEATURE:
NAME/KEY: CDS
LOCATION: 27...
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: Birch, St
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APPLICATION NUMBER: US 07/791,213
FILING DATE: 13-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 2-306745
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy
COMPUTER: IBM PC com
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ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 313 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 19-AUC CLASSIFICATION: 51
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296.00
92.73%
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89.97%
                                      PROCESS FOR PRODUCING PROTEIN USING 65
 Stewart, Kolasch & Birch
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Indels:
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COUNTRY:

Falls Church : Virginia RY: USA 22040-3487

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Best Local Similarity:
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Sequence 13, Application US/07972387
Patent No. 5451659
GENERAL INFORMATION:
APPLICANT: Morishita, Hideaki
APPLICANT: Kanamori, Toshinori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 703-205-8050
INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHARACTERISTICS:
LENGTH: 343 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: Murphy Jr., Gerald M.
REGISTRATION NUMBER: 28,977
REFERENCE/DOCKET NUMBER: 1110
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-205-8000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY:
LOCATION:
FEATURE:
NAME/KEY:
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/235,515A
FILING DATE: 29-APR-1994
CLASSIFICATION: 435
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: 1..343
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                              189 GATGCT
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                                                                                                                                           249 AAGTTCTACTCAGAGAAGGAGTGCAGAGAGTACTGCGGTGTCCCT
                                                                                                                                                                    42 LysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56
                                                                                                                                                                                                                               22 ASDAlaValLySGlyLySCYSValLeuPheProTyrGlyGlyCySGlnGlyAsnGlyAsn 41
                                                                                                                                                                                                                                                                                                                 2 AlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAlaPhe 21
                                                                                                                                                                                                                                                                                GCCTGTAATCTACCAATAGTCCGGGGCCCCTGCCGAGCCTTCATCCAGCTCTGGGCATTT 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mat_peptide
90..329
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27..89
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296.00
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92.73%
89.97%
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/note= "j-x1-y-z(AN68), insert in plasmid pM710,
Figure 11"
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Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                         Indels:
                                                                                                                                                                                                              CTTCCCCTACGGGGCTGCCAGGGCAACGGGAAC 248
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110 GCCTGTAATCTACCAATAGTCCGGGGCCCCTGCCGAGCCTTCATCAAGCTCTGGGCATTT 169

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                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
                                               US-10-038-722-27 (1-56) x US-07-972-387-13 (1-344)
                                                                                                                                                                     Pred. No.:
                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                           US-07-972-387-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 703-241-2848
TELEX: 248345
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: NO. 54516
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Murphy Jr., Gerald M.
REGISTRATION NUMBER: 28,977
REFERENCE/DOCKET NUMBER: 11.
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-241-1300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Release #1.0, Version CURRENT APPLICATION DATA: APPLICATION NUMBER: US/07/972,387 FILING DATE: 19921105 CLASSIFICATION: 435 ATTORNEY/ACENT INFORWATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HYPOTHETICAL: NO ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                            FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 344 base pairs
TYPE: NUCLEIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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LOCATION: 1..344
OTHER INFORMATION:
OTHER INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: sig_peptide
LOCATION: 44..106
OTHER INFORMATION: /st
OTHER INFORMATION: sec
                                                                                                                                                                                                                                                                                           NAME/KEY: mat_peptide
LOCATION: 107:.310
OTHER INFORMATION: /standard_name= "polypeptide
OTHER INFORMATION: Q19K-AN"
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ZIP: 22046-0747
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
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2 AlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAlaPhe 21
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JE5055 (pM576B)
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VENTION: Polypeptide, DNA Fragment Encoding the VENTION: Same, Drug Composition Containing the Same VENTION: Producing the Same
                                                                                                                                                                                                                                           44..310
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89.97%
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sequence"
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/note= "as in Figure
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Matches:
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                                                                                                                                                                                                                                                                                                                                                     TELEX: 248345
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 344 base pairs
TYPE: nucleic acid
STRANDENNESS: double
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APPLICANT: Morish
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APPLICATION UNMBER: US 07/972
FILING DATE: 05-NOV-1992
ATTORNEY/AGENT INFORMATION:
NAME: MUTPHY JT., Gerald M.
REGISTRATION NUMBER: 28,977
REFERENCE/DOCKET NUMBER: 110
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-241-1300
                                                                                                                                                                                      FEATURE:
NAME/KEY:
LOCATION:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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APPLICANT: No. 5589360uhara, Masahiro
TITLE OF INVENTION: Producing the Same
TITLE OF INVENTION: Same, Drug Composition Containing the STITLE OF INVENTION: Producing the Same
                                                     FEATURE:
                                                                                                                                                                                                                                                                                   HYPOTHETICAL: N
ORIGINAL SOURCE:
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                NAME/KEY:
                                                                  NAME/KEY: sig_peptide
LOCATION: 44..106
OTHER INFORMATION: /si
OTHER INFORMATION: sec
                                                                                                                                                         LOCATION: 1..344
OTHER INFORMATION:
OTHER INFORMATION:
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STREET: 301 N. Washington St.
CITY: Falls Church
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 22046-0747
 OTHER INFORMATION:
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JE5055 (pM576B)
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                mat_peptide
107..310
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                                                                                                                                                                                                                                                                                                                      DNA (genomic)
                                                                  /standard_name= "pho A signal
sequence"
/standard_name= "polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US 07/972,387
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/note= "as in Fig
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RESULT 22
US-08-057-971-13
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Best Local Similarity:
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                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPUTER: IBM PC COMPATIBLE

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PATENTIN Release #1.0, V

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/057,971
                                                                                       INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 344 base pairs
TYPE: nucleic acid
CTEANTERNECS: 40:512
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NAME/KEY:
LOCATION:
                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: 11
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-205-8000
                                                                                                                                                                                                                                                                                                      FILING DATE: 06-MAY-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
MOLECULE TYPE: DI
HYPOTHETICAL: NO
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Kanamori, Toshinori
APPLICANT: No. 5679770uhara, Masahiro
TITLE OF INVENTION: Polypeptide, DNA Fragment Encoding the
TITLE OF INVENTION: Same, Drug Composition Containing the &
TITLE OF INVENTION: Producing the Same
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: P.O. Box 7
CITY: Falls Church
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                                                       TOPOLOGY:
                                                                         STRANDEDNESS:
                                                                                                                                                                                                                                                                     NAME: Murphy Jr., Gerald M. REGISTRATION NUMBER: 28,977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZIP: 22040-0747
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5. 5679770
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7: USA
                                                                                                                                                                                             703-205-8050
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                                                         linear
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O. Box 747
                                   DNA (genomic)
                                                                             double
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                                                                                                                                                                                                                                                       1110-129P
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Matches:
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Indels:
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Best Local Similarity:
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Patent No. 5451659
GENERAL INFORMATION:
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OTHER INFORMATION: /star
OTHER INFORMATION: seque
FEATURE:
           COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version #1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/972,387
FILING DATE: 19921105
CLASSIFICATION: 435
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NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                APPLICANT: Morishita, Hideaki
APPLICANT: Kanamori, Toshinori
APPLICANT: No. 5451659uhara, Masahiro
                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: Birch, Stewart,
                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Polypeptide, DNA Fragment Encoding TITLE OF INVENTION: Same, Drug Composition Containing to TITLE OF INVENTION: Producing the Same
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NAME/KEY:
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ATTORNEY/AGENT INFORMATION:
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LOCATION:
                                                                                                                                                                                     STREET: 301 N. Washington St. CITY: Falls Church
STATE: Virginia
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Q19K-AN"
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sequence"
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/note= "as in Fig
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Matches:
Conservative:
Mismatches:
Indels:
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US-08-431-412-3
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Best Local Similarity:
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Pred. No.:
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TELEX: 248345
INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
LENGTH: 349 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: double
                                                                                                                                                                          Sequence 3, Patent No.
GENERAL INFORMATION:
APPLICANT: Morishita, Hideaki
APPLICANT: Kanamori, Toshinori
APPLICANT: No. 5589360thara, Masahiro
TITLE OF INVENTION: Polypeptide, DNA Fragment Encoding the
TITLE OF INVENTION: Same, Drug Composition Containing the :
TITLE OF INVENTION: Producing the Same
NUMBER OF SEQUENCES: 76
CORRESPONDENCE ADDRESS:
ADDRESSEE: Birch, Stewart, Kolasch & Birch
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LOCATION: 44..106
OTHER INFORMATION: /st
OTHER INFORMATION: pep
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OTHER INFORMATION:
OTHER INFORMATION:
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REFERENCE/DOCKET NUMBER: 1110-124P
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                                                                                                                                                               Mo. 5589360
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92.73%
89.97%
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peptide"
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Matches:
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Indels:
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Best Local Similarity:
Query Match:
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                                                                                                                                   US-10-038-722-27 (1-56) x US-08-431-412-3 (1-349)
                                                                                                                                                                                                                                                                                                         US-08-431-412-3
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 349 base pairs
                                                                                                                                                                                                                                                                                                                                                      LOCATION: 107.316
OTHER INFORMATION: /product= "polypeptide Q19K"
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: DN
HYPOTHETICAL: NO
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Murphy Jr., Gerald M.
REGISTRATION NUMBER: 28,977
REFERENCE/DOCKET NUMBER: 11.
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-241-1300
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC COMPATIBLE
COMPUTER: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
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PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 05-NOV-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                        NAME/KEY:
LOCATION:
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LOCATION: 44..106
OTHER INFORMATION: /st
OTHER INFORMATION: pep
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OTHER INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: nucleic acid
STRANDEDNESS: double
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 176
                                                                 116 GCCTGCAATCTCCCCATAGTCCGGGGCCCTGCCGAGCCTTCATCAAGCTCTGGGCATTT
                               22
                                                                                              2 AlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAlaPhe 21
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GATGCTGTCAAGGGGAAGTGCGTCCTCTTCCCCTACGGGGCTGCCAGGGCAACGGGAAC 235
                             AspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsn 41
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JE5505 (pM576)
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107..316
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92.73%
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peptide"
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/note= "as in figure 16"
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Matches:
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US-08-057-971-3
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 Score:
              Alignment Scores: Pred. No.:
                                                            US-08-057-971-3
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, V.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/057,971
FILING DATE: 06-MAY-1993
CLASSIFICATION: 435
ATTORNEY/AGENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
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                                                                                                            FEATURE:
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LENGTH: 349 base pairs
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REFERENCE/DOCKET NUMBER: 11
TELECOMMUNICATION INFORMATION:
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TITLE OF INVENTION:
                                                                                                                                                                          FEATURE:
                                                                                                                                                                                    NAME/KEY: sig_peptide
LOCATION: 44..106
OTHER INFORMATION: /sta
OTHER INFORMATION: pept
                                                                                                                                                                                                                                                                                                                                     FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE:
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                                                                                                                                                                                                                                                                     NAME/KEY: -
LOCATION: 1..349
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                HYPOTHETICAL:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                ORGANISM: Eschericia coli
STRAIN: JE5505 (pM576)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: Birch, St. STREET: P.O. Box 747 CITY: Falls Church
                                                                                             NAME/KEY:
                                                                                                                            OTHER INFORMATION:
                                                                                                                                          NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Murphy Jr., Gerald M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                             LOCATION:
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nucleic acid
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VENTION: Polypeptide, DNA Fragment Encoding the
VENTION: Same, Drug Composition Containing the
VENTION: Producing the Same
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peptide"
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                                                                                                                         /product= "polypeptide Q19K"
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/note= "as in fig
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Search Job tim	D Q	Db Qy	g &	US-10-C	Percent Simi Best Local S Query Match: DB:
Search completed: February 23, 2005, 06:04:39	42 LysPheTyrSerG 236 AAGTTCTACTCAG	22 AspAlaValLysG 176 GATGCTGTCAAGG	2 AlaCysAsnLeuP 116 GCCTGCAATCTCC)38-722-27 (1-56) x U	larity: imilarity:
23, 2005, 06:04:39	42 LysPheTyrSerGluLysGluCysArgGluTyrCysGlyValPro 56	22 AspAlaValLysGlyLysCysValLeuPheProTyrGlyGlyCysGlnGlyAsnGlyAsn 	2 AlaCysAsnLeuProIleValArgGlyProCysIleAlaPhePheProArgTrpAlaPhe 21 	US-10-038-722-27 (1-56) x US-08-057-971-3 (1-349)	92.73% Conservative: 92.73% Mismatches: 89.97% Indels: 1 Gaps:
	ValPro 56 GTCCCT 280	GlyCysGlnGlyAsnGlyAsn 41 ggCTGCCAGGGCAACGGGAAC 235	PhePheProArgTrpAlaPhe 21 		

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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geneseqp20018:*
geneseqp20028:*
geneseqp2003as:*
geneseqp2003bs:*
geneseqp20048:*
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SUMMARIES

(PROT-) PROTEIN ENG CORP.

WPI; 1996-321851/32.

Ley AC,

Ladner RC,

Guterman SK,

Roberts BL,

Markland W,

Kent

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Aar99214 Modified	Adf71968 Kallikrei	Adf71967 Kallikrei	Aar99167 Genetical	Adr90020 DPI-14-(G	Adf42028 DPI-14-(G	Adr90049 pDB2300X3		1 Mature D	Adf42029 DPI-14-(G	~~	Adf42058 Albumin f	Adr90046 pDB2300X2	Adf42054 Plasmid p	Adr90034 N-termina	Adr90036 C-termina	Adf42044 C-termina	Adf42042 N-termina	Abr84585 Fusion se	Abr84583 P pastori	Aar99215 Modified	Adr90015 DX-890 (a	Adf71969 Kallikrei	Adf42070 Albumin f	Aar99168 Genetical	Description

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AAR65481	AAR99698	AAW69521	AAW25930	AAR92232	AAR65478	AAR61162	ADR89983	ADF71951	ADF42000	AAW92863	AAW64116	AAR99166	AAR81927	AAR78555	AAB14179	AAR61157	AAR61158	AAR61156	AAR61165
Aar65481	Aar99698	Aaw69521	Aaw25930	Aar92232	Aar65478	Aar61162	Adr89983	Adf71951	Adf42000	Aaw92863	Aaw64116	Aar99166	Aar81927	Aar78555	Aab14179	Aar61157	Aar61158	Aar61156	Aarbiibs
Protein c	Human uri	UTI prote	Anti-tryp	Human uri	The amino	Elastase	Human ITI	Kallikrei	Human ITI	US5880256	Human Kun	Human apr	Human ITI	Human ITI	Inter-alp	Elastase	Elastase	Elastase	Flascase

ALIGNMENTS

RESULT 1 AAR99168 Aprotinin; Kunitz domain; human neutrophil elastase; hNE; connective tissue; alpha 1 protease inhibitor; API; neutrophil; alphal antitrypsin; respiratory disorder; cystic fibrosis; 04-JUL-1996. Synthetic. smokers emphysema. Genetically engineered aprotinin-like Kunitz domain (EPI-HNE-4). AAR99168; 16-DEC-1994; 15-DEC-1995; WO9620278-A2 12-FEB-1997 AAR99168 standard; protein; (first entry) 94US-00358160. 95WO-US016349. 56 ጅ

Genetically engineered human derived Kunitz domains can be used to inhibit human neutrophil elastase, an enzyme involved in the elimination of pathogens and the restructuring of connective tissue. In cases of reduction of the circulating alpha-1-protease inhibitor (API or alphal antitrypsin), or the inactivation of API by oxidation (smokers emphysema), extensive destruction of the lung tissue may result from uncontrolled elastolytic activity of human neutrophil elastase. Other respiratory disorders such as cystic fibrosis are thought to be caused by human neutrophil elastase release by neutrophils. The genetically engineered human derived Kunitz domains can be used to treat such New engineered inhibitors of human neutrophil elastase - contg. aprotinin -like Kunitz domain for treating, e.g. cystic fibrosis or other respiratory disorders. Claim 1; Page 49; 105pp; English.

See AAR99146-R99211

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ADPEZION 2

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                                                                                                                                                                                                                                                                                        The invention relates to a novel albumin fusion protein comprising a Kunitz domain peptide or its fragment or variant and an albumin or its fragment or variant. The fusion protein of the invention demonstrates cytostatic and haemostatic activities and may be useful for preparing a composition for treating a patient with hereditary angioedema, an angioedema-related disease, cancer, a cancer-related disease or a bleeding disorder, as well as during gene therapy procedures. The current sequence is that of the albumin fusion protein-related DX-890 peptide of
                                                                                                                                                                                                                  Sequence 56 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Albumin fusion protein comprising a Kunitz domain peptide and an albumin, useful for preparing a composition for treating a patient with hereditary angioedema or angioedema-related disease, cancer or bleeding disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-731497/69.
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(AVET )
(DELZ )
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(DYAX-)
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AVENTIS BEHRING LLC.
DELTA BIOTECHNOLOGY LTD.
DYAX CORP.
                                                                                                                                   Similarity
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                            EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
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EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP
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Pred. No. 1.4e-34;
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RESULT 3

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RESULT 4
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                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 56
                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes a method (M1) for preventing or reducing ischaemia in a patient. M1 involves administering to the patient a composition comprising a polypeptide (I) having an amino acid sequence of ADP71926 and inhibiting kallikrein. (I) has vasotropic activity, and can be used as a kallikrein inhibitor. (M1) is useful for preventing or reducing ischaemia in a patient such as perioperative blood loss due to a surgical procedure which is cardiothoracic surgery (e.g. cardiopulmonary bypass or coronary artery bypass grafting) performed on the patient. (M1) is also useful for preventing or reducing the onset of systemic inflammatory response associated with a surgical procedure in a patient which involves administering (I) to a patient. The present sequence is used in the exemplification of the present invention.
                              hereditary angioedema; cancer; chronic obstructive pulmona: asthma; bronchitis; acute respiratory syndrome; pneumonia;
                                           Kunitz domain peptide; cystic fibrosis; cystic fibrosis related disease; hereditary angioedema; cancer; chronic obstructive pulmonary disease;
                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-JUN-2002;
28-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ischaemia; vasotropic; kallikre systemic inflammatory response
                                                                                            DX-890
                                                                                                                          18-NOV-2004
                                                                                                                                                       ADR90015;
                                                                                                                                                                                   ADR90015 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; SEQ ID NO 49; 46pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 patient composition comprising a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Preventing or reducing ischemia in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-062190/06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-JUN-2003; 2003WO-US017665
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kallikrein inhibitor related amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADF71969 standard; protein; 56 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ladner RC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (-XAYD)
                                                                                            (an
                                                                                                                                                                                                                                                                \vdash
                                                                                                                                                                                                                                                                                                                           56;
                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                                                                                                       56 AA;
                                                                                                                                                                                                                                                                EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP
                                                                                            inhibitor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ley AC,
                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2002US-0387239P.
2002US-0407003P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                         (first entry)
                                                                                                                                                                                   peptide;
                                                                                                                                                                                                                                                                                                                                        100.0%;
                                                                                         of human neutrophil elastase) kunitz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hirani
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           kallikrein inhibitor; blood
                                                                                                                                                                                     56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                           Score 329; DB 8;
Pred. No. 1.4e-34;
; Mismatches 0;
                                                                                                                                                                                     ₿
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Williams
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                in patient involves administering to kallikrein inhibitory polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sequence SEQ ID NO:49.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ×
                                                                                                                                                                                                                                                                                                                                                         Length 56;
                                                                                            domain
                                                                                                                                                                                                                                                                                                                           ,
                                                                                                                                                                                                                                                                                                                         Gaps
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07-FEB-2003; 2003US-00361997.

02-SEP-2004. US2004171794-A1 Unidentified

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RESULT 5
AAR99215
AAR99215
AC AAR9
DT 14-J
DT AAR9
DE MOD
XX BMM
XX BMM
XX SMM

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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to proteins comprising kunitz domain peptide, designated DPI-14 for inhibiting human neutrophil elastase, fused to albumin. The invention is useful for treating cystic fibrosis and related diseases, hereditary angioedema, cancer and related diseases including chronic obstructive pulmonary disease, asthma, bronchitis, acute respiratory syndrome, pneumonia and bleeding. The invention acts as a cytostatic and haemostatic agent. The present sequence is a DX-890 (an inhibitor of human neutrophil elastase) kunitz domain peptide. This sequence is used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (LADN/)
  WPI; 1996-321851/32
                                                                                                                                                                                                                                               04-JUL-1996.
                                                                                                                                                                                                                                                                                                WO9620278-A2
                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                smokers emphysema.
                                                                                                                                                                                                                                                                                                                                                                                                                          alphal antitrypsin;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Aprotinin; Kunitz of connective tissue;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Modified Kunitz domain EPI-HNE-4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR99215;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR99215 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-625120/60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ladner RC, Ley AC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-FEB-2003; 2003US-00361997.
                                                 Ley AC,
                                                                                                                                                16-DEC-1994;
                                                                                                                                                                                              15-DEC-1995;
                                                                                                    (PROT-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      kunitz domain
the treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    بر
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     l Similarity
56; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LADNER R C.
LEY A C.
                                                                                                    PROTEIN ENG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95
                                                 Ladner RC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EACNLPIVRGPCIAFFFRWAFDAVKGKCVLFFYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                                                                                                                                                              Kunitz domain; human neutrophil elastase; hNE; tissue; alpha 1 protease inhibitor; API; neutrophil;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                   94US-00358160
                                                                                                                                                                                                 95WO-US016349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 peptide useful of e.g. cystic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein; 141
                                                                                                       CORP
                                                                                                                                                                                                                                                                                                                                                                                                                          respiratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
                                                   Guterman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 329; DB 8;
Pred. No. 1.4e-34;
); Mismatches 0;
                                                   SK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ጀ
                                                                                                                                                                                                                                                                                                                                                                                                                            disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      as human neutrophil e
fibrosis and related
                                                   Roberts BL,
                                                                                                                                                                                                                                                                                                                                                                                                                          cystic
                                                   Markland
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 56;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           elastase inhibitor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                   Kent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                   RB;
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RESULT 6
ABR84583
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Genetically engineered human derived Kunitz domains can be used to CC inhibit human neutrophil elastase, an enzyme involved in the elimination of pathogens and the restructuring of connective tissue. In cases of CC reduction of the circulating alpha-1-protease inhibitor (ApI or alphal CC emphysema), or the inactivation of ApI by oxidation (smokers CC emphysema), extensive destruction of the lung tissue may result from CC uncontrolled elastolytic activity of human neutrophil elastase. Other CC respiratory disorders such as cystic fibrosis are thought to be caused by CC human neutrophil elastase by neutrophils. The genetically CC engineered human derived Kunitz domains can be used to treat such crespiratory disorders. See AAR99146-R99211. Fusion genes were used in the CC respiratory disorders. See AAR99146-R99211. Fusion genes were used in the CC production of the Kunitz domain derivatives. Protein expression cassettes are then cloned into the plasmid pHIL-D2 using BBtBI and EcoRI CC restriction sites. The cloned sequence is under the transcriptional CC control of Pichia pastoris aox1 gene promoter and regulatory sequences and downstream polyadenylation and transcription termination sequences. CC Transformed strains of P. pastoris were used to express the various EPI-CC ensemble of the control of Pichia pastoris were used to express the various EPI-CC ensemble of the control of proteins derived from the BPTI and ITI-D2 Kunitz domains. This sequence is a modified Kunitz domain (EPI-HNE-4) which was expressed from the control of Pichia pastoris were used to express the capture of the control of Pichia pastoris were used to express the various EPI-CC ensemble of the control of Pichia PATICA contro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches 56
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New engineered inhibitors of human neutrophil elastase - contg. -like Kunitz domain for treating, e.g. cystic fibrosis or other respiratory disorders.
                                                                                                                                                                                                                                                                                                                                                                                                  Pichia pastoris.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EPI-hNE-4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P pastoris prepro-EPI-hNE-4 mutated protein.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N-PSDB; AAT35168.
                                                                                                                                                                                                                   23-JAN-2002; 2002EP-00290166
                                                                                                                                                                                                                                                             23-JAN-2003; 2003WO-EP001212
                                                                                                                                                                                                                                                                                                            31-JUL-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EPI-hNE; alpha
                                                                                                                            Poncin A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
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100.0%; F
tive 0;
                                                                                                                              Saudubray
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mating factor prepropeptide; mutant; mutagenic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 329; DB 2;
Pred. No. 3.8e-34;
; Mismatches 0;
                                                                                                                              'E
                                                                                                                              Petchot-Bacque
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New fused gene constructs and expression vectors, useful for transforming microorganisms (particularly the yeast Pichia pastoris) for use in

WPI; 2003-598755/56. N-PSDB; ACF04569.

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ABR84585
ID ABR8
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Matches 56
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         mating factor prepropeptide or its variant, which is modified so as to replace the Lysine residue in position 76 of the amino acid sequence of the naturally occurring prepropeptide by an Alanine residue. The nucleotide sequence is ligated to the 5' terminal of a nucleotide sequence is ligated to the 5' terminal of a nucleotide sequence coding for EPI-hNE-4. An expression vector for the sequence is also claimed. The gene construct or vector is useful for transforming microorganisms (particularly yeast) to produce EPI-hNE-4 protein with very low levels of its improperly processed form. The gene construct, nucleotide sequence, expression vector or microorganisms is useful for producing or secreting a protein, particularly EPI-hNE-4, which contains undetectable levels of the EPI-hNE-4 (n+9). This facilitates further purification steps, and therefore results in economies both on the financial and time-spent scale. The present sequence is a mutated version of the Pichia pastoris EPI-hNE-4 protein used in the exemplification of
                                                    New fused gene constructs and expression vectors, useful for transforming microorganisms (particularly the yeast Pichia pastoris) for use in producing e.g. EPI-hNE-4 proteins with very low levels of its improperly processed form.
                                                                                                                                                                                WPI; 20
N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2003062431-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EPI-hNE-4;
mutagenic.
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     Claim 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Saccharomyces cerevisiae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fusion sequence of alpha mating factor and EPI-hNE-4.
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                                                                                                                                                                                                                                                                                                                                                          23-JAN-2002; 2002EP-00290166
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                                                                                                                                                                                2003-598755/56.
DB; ACF04571.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             pastoris.
                                                                                                                                                                                                                                                                                                           DEBIOPHARM SA
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  Fig 10;
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                                                                                                                                                                                                                                                       Poncin A,
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27pp;
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                                                                                                                                                                                                                                                         Saudubray F,
  English.
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Pred. No. 3.8e-34;
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The present

invention relates to a fused gene construct, which comprises

The invention relates to a novel albumin Kunitz domain peptide or its fragment or

fusion p

t protein

comprising albumin or

Example 23; Page 75; 110pp; English.

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Best Local Similarity
                                                                                                                                                                    Albumin fusion protein comprising a Kunitz domain useful for preparing a composition for treating a angioedema or angioedema-related disease, cancer of the control of the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic. Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     albumin fusion; Kunitz domain; cytostatic; haemostatic; hereditary angioedema; cancer; bleeding; gene therapy; N-terminal DX-890-(GGS)4GG-albumin fusion.
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                                                                                                                                                                                                                                                                                                                         WPI; 2003-731497/69.
N-PSDB; ADF42041.
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(AVET )
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                                                                                                                                                                                                                                                                                                                                                                                                                                     Ley AC;
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AVENTIS BEHRING LLC.
DELTA BIOTECHNOLOGY LTD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Weimer T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DX-890-(GGS)4GG-albumin fusion protein.
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Pred. No. 3.8e-34;
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                                                                                                                                                                       n peptide and an albumin, a patient with hereditary or bleeding disorder.
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RESULT 9
ADF42044
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              The invention relates to a novel albumin fusion protein comprising a Kunitz domain peptide or its fragment or variant and an albumin or its fragment or variant. The fusion protein of the invention demonstrates cytostatic and haemostatic activities and may be useful for preparing a composition for treating a patient with hereditary angioedema, an angioedema-related disease, cancer, a cancer-related disease or a bleeding disorder, as well as during gene therapy procedures. The current sequence is that of the C-terminal albumin-(GGS)4GG-DX-890 fusion protein
                                                                                                                                                                                                                                                                                                                                                                                                                                  Hauser H,
Ley AC;
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useful for
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DB; ADF42043.
invention
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                                                                                                                                                                                                                                                                   fusion protein comprising a Kunitz domain peptide and an albumin, for preparing a composition for treating a patient with hereditary ema or angioedema-related disease, cancer or bleeding disorder.
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AVENTIS BEHRING LLC
DELTA BIOTECHNOLOGY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             Weimer
                                                                                                                                                                                                                          Page 76; 110pp;
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Pred. No. 2.1e-33;
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RESULT 10
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Best Local
                                                                                                                                                                      The invention relates to proteins comprising kunitz domain peptide, designated DPI-14 for inhibiting human neutrophil elastase, fused to albumin. The invention is useful for treating cystic fibrosis and related diseases, hereditary angioedema, cancer and related diseases including chronic obstructive pulmonary disease, asthma, bronchitis, acute respiratory syndrome, pneumonia and bleeding. The invention acts as a cytostatic and haemostatic agent. The present sequence is a C-terminal DX-890-(GGS)4 GG-albumin fusion protein. This fusion protein contains DX-890 cDNA encoding protein, GS linker region and human albumin (HA) encoding protein. This sequence is used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kunitz domain peptide; cystic fibrosis; cystic fibrosis related disea hereditary angioedema; cancer; chronic obstructive pulmonary disease; asthma; bronchitis; acute respiratory syndrome; pneumonia; bleeding; cytostatic; haemostatic; chimeric; DX-890; human albumin; HA; human.
                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                        Example
                                                                                                                                                                                                                                                                                                                                                                                                                                       N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-FEB-2003; 2003US-00361997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-FEB-2003; 2003US-00361997.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C-terminal DX-890-(GGS)4 GG-albumin fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-NOV-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADR90036;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADR90036 standard;
                                                                                                                                                            invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ladner RC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LEYA/) LEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LADN/)
                                                                                                                                                                                                                                                                                                                                                                                     kunitz domain peptide useful as human neutrophil elastase inhibitor the treatment of e.g. cystic fibrosis and related disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                       2004-625120/60
DB; ADR90035.
600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            56;
                               Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                              56;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LADNER R
LEY A C.
                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                       9; SEQ ID NO 61; 123pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                    EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                            655
EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ley AC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                          AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein; 655
                                                                           100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%;
                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <u>.</u>
                                                            Score 329; DB 8;
Pred. No. 2.1e-33;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 329; DE ...
No. 2.1e-33;
                                                                                                                                                                                                                                                                                                                                                       English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 fibrosis related disease;
                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 655;
                                                               Indels
                                                                                                                                                                                                                                                                                                      domain peptide,
                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
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Sequence

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RESULT 12
ADF42054
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                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 56
                                                                                                                                                                                                                                                                                                                                      The invention relates to proteins comprising kunitz domain peptide, designated DPI-14 for inhibiting human neutrophil elastase, fused to albumin. The invention is useful for treating cystic fibrosis and relationsess, hereditary angioedema, cancer and related diseases including chronic obstructive pulmonary disease, asthma, bronchitis, acute respiratory syndrome, pneumonia and bleeding. The invention acts as a cytostatic and haemostatic agent. The present sequence is a N-terminal -890-(GGS)4 GG-albumin fusion protein. This fusion protein contains DX-890 cDNA encoding protein, GS linker region and human albumin (HA) encoding protein. This sequence is used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kunitz domain peptide; cystic fibrosis; cystic fibrosis related disea hereditary angioedema; cancer; chronic obstructive pulmonary disease; asthma; bronchitis; acute respiratory syndrome; pneumonia; bleeding; cytostatic; haemostatic; chimeric; DX-890; human albumin; HA; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N-terminal DX-890-(GGS)4 GG-albumin fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADR90034 standard;
 albumin
                                                                                                                                                                                                                                                                                                 Sequence 655 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2004171794-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-NOV-2004
                         Plasmid pDB2300X2 NotI modified expression cassette
                                                        12-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ladner RC, Ley AC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-FEB-2003; 2003US-00361997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-FEB-2003; 2003US-00361997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADR90034;
                                                                                                             ADF42054 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New kunitz domain peptide useful as human neutrophil elastase inhibitor for the treatment of e.g.\ cystic fibrosis and related disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (LADN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2004-625120/60.
                                                                                                                                                                                                  1 EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                         56;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LADNER R C.
fusion; Kunitz domain; cytostatic; haemostatic;
                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8; SEQ ID NO 59; 123pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADR90033.
                                                                                                                                                                                    EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A C.
                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein; 655
                                                                                                             protein;
                                                                                                                                                                                                                                                        100.0%;
                                                                                                                694
                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                      Score 329; DB 8;
Pred. No. 2.1e-33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                     Length 655;
                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     disease;
                                                                                                                                                                                     56
                                                                                                                                                                                                                                                                                                                                                                                                                                             related
                                                                                                                                                                                                                                                                                                                                                                                     DX
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RESULT 13
ADR90046
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Best Local S
Matches 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a novel albumin fusion protein comprising a Kunitz domain peptide or its fragment or variant and an albumin or its fragment or variant. The fusion protein of the invention demonstrates cytostatic and haemostatic activities and may be useful for preparing a composition for treating a patient with hereditary angioedema, an angioedema-related disease, cancer, a cancer-related disease or a bleeding disorder, as well as during gene therapy procedures. The current sequence is that of the albumin fusion protein-related plasmid pbB2300X2 modified NotI expression cassette protein of the invention which has N-terminal DX-890 and C-terminal linker ready for a second DX-890 sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (AVET )
(AVET )
(DELZ )
(DYAX-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hereditary angioedema; cancer; bleeding; gene therapy; plasmid pDB2300X2 NotI expression cassette; DX-890.
                                                                                  Kunitz domain peptide; cystic fibrosis; cystic fibrosis related disease; hereditary angioedema; cancer; chronic obstructive pulmonary disease; asthma; bronchitis; acute respiratory syndrome; pneumonia; bleeding; cytostatic; haemostatic; chimeric; human; rHA synthase gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Albumin fusion protein comprising a Kunitz domain peptide and an albumin, useful for preparing a composition for treating a patient with hereditary angioedema or angioedema-related disease, cancer or bleeding disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-731497/69.
N-PSDB; ADF42053.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hauser H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-FEB-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                           pDB2300X2-2xGS linker fusion
                                                                                                                                                                                         18-NOV-2004
                                                                                                                                                                                                                                                 ADR90046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 23; Page 85-89; 110pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ley
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-FEB-2002; 2002US-0355547P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-AUG-2003.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unidentified.
                                       Homo sapiens
                                                                     albumin;
                                                                                                                                                                                                                                                                                                                       25
                                                                                                                                                                                                                                                                                                                                                                                 56;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AVENTIS BEHRING GMBH.
AVENTIS BEHRING LLC.
DELTA BIOTECHNOLOGY LTD.
DYAX CORP.
                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                           694
                                                                                                                                                                                                                                                                                                                                        EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                standard;
                                                                                                                                                                                                                                                                                                                         EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Weimer T,
                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                         A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2003WO-US003616
                                                                                                                                                                                        (first entry)
                                                                     HA.
                                                                                                                                                                                                                                                protein;
                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Romberg V,
                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                           protein.
                                                                                                                                                                                                                                                                                                                                                                              Score 329; DB 7;
Pred. No. 2.2e-33;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sleep D,
                                                                                                                                                                                                                                                                                                                                                                                                           Length 694;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ladner RC;
                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                Gaps
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RESULT 14
ADF42058
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                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                           Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                     The invention relates to proteins comprising kunitz domain peptide, designated DPI-14 for inhibiting human neutrophil elastase, fused to albumin. The invention is useful for treating cystic fibrosis and related diseases, hereditary angioedema, cancer and related diseases including chronic obstructive pulmonary disease, asthma, bronchitis, acute respiratory syndrome, pneumonia and bleeding. The invention acts as a cytostatic and haemostatic agent. The present sequence is a pDB2300X2-2xGS linker fusion protein. This chimeric protein contains DX-890 protein at its N-terminal end, rHA synthase gene encoding protein and linkers at
          Synthetic.
Unidentified
                                                   albumin fusion; Kunitz
hereditary angioedema;
                                                                                       Albumin fusion-related DX-890. . (GGS) 4GG.
                                                                                                               12-FEB-2004
                                                                                                                                                             ADF42058
                                                                                                                                                                                                                                                                                                           Sequence 694 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 18; SEQ ID NO 71; 123pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ladner RC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-FEB-2003; 2003US-00361997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-FEB-2003; 2003US-00361997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key
                                                                                                                                                                                                                                                                                                                                             its C-terminal end. This sequence is used in the exemplification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (LEYA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (LADN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               kunitz domain peptide useful
the treatment of e.g. cystic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2004-625120/60
                                                                                                                                                                                                                    25
                                                                                                                                                                                                                                         ۲
                                                                                                                                                                                                                                                                56;
                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LADNER R C.
LEY A C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADR90045.
                                                                                                                                                                                                                    EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                           standard;
                                                                                                                                                                                                                                                               100.0%;
ilarity 100.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ley AC;
                                                                                                             (first entry
                                                     Kunitz domain;
oedema; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'note= "rHA protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  'note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         'note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               label= Signal_peptide
                                                                                                                                                           protein; 728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . 694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .94
.e= "GS-linker region"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             . 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "DX-890 protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Mature
                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                               Score 329; DB 8;
Pred. No. 2.2e-33;
; Mismatches 0;
                                                     cytostatic; haemostatic; bleeding; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       pDB2300X2-2xGS linker
                                                                                                                                                             ₿
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               as human neutrophil elastase inhibitor fibrosis and related disease.
                                                                                       .HA. . (GGS) 4GG.
                                                                                                                                                                                                                                                                                   Length 694;
                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         fusion
                                                       (GGS) 4GG;
                                                                                       .DX-890 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein"
                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                              nkers at
                                                       DX-890;
                                                                                                                                                                                                                                                                0
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ADR900 ID ADR900 XX ADR900 XX ADR900 XX ADR90 XX ADR90 XX Homoods KW hered KW hered KW hored KW homan XX Homoods Chime OS Chime OS Chime OS Chime OS Chime XX US200 XX US200 XX US200 XX X U7-FE XX 07-FE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a novel albumin fusion protein comprising a Kunitz domain peptide or its fragment or variant and an albumin or its fragment or variant. The fusion protein of the invention demonstrates cytostatic and haemostatic activities and may be useful for preparing composition for treating a patient with hereditary angioedema, an angioedema-related disease, cancer, a cancer-related disease or a bleeding disorder, as well as during gene therapy procedures. The curr sequence is that of the albumin fusion protein-related DX-890. .(GGS) 4GG. .HA. .(GGS) 4GG. .DX-890 protein of the invention.
                                                                                                                                                                                                                Kunitz domain peptide; cystic fibrosis; cystic fibrosis related disease; hereditary angioedema; cancer; chronic obstructive pulmonary disease; asthma; bronchitis; acute respiratory syndrome; pneumonia; bleeding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Albumin fusion protein comprising a Kunitz domain peptide and an albumin, useful for preparing a composition for treating a patient with hereditary angioedema or angioedema-related disease, cancer or bleeding disorder.
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(AVET )
(DELZ )
(DYAX-)
              07-FEB-2003;
                                           07-FEB-2003; 2003US-00361997.
                                                                                                                                                                                                     cytostatic; haemostatic; chimeric; human;
                                                                                                                                                                                                                                                                          Mature pDB2300X3-2xDX-890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 728 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 23; Page 94-95; 110pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-FEB-2002; 2002US-0355547P
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                                                                                                  US2004171794-A1
                                                                                                                               Unidentified
                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                      human albumin;
                                                                                                                                                                                                                                                                                                      18-NOV-2004
                                                                                                                                                                                                                                                                                                                                   ADR90050;
                                                                                                                                                                                                                                                                                                                                                            ADR90050 standard; protein; 728
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AVENTIS BEHRING LLC.
DELTA BIOTECHNOLOGY LTD
DYAX CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                    EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                2003US-00361997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2003WO-US003616
                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                      HA; DX-890.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%;
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                                                                                                                                                                                                                                                                          fusion
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 329; DB 7;
Pred. No. 2.3e-33;
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                                                                                                                                                                                                                                                                          protein.
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                                                                                                                                                                                                       gene;
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Best Local S
Matches 56
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(LEYA/)
Albumin fusion protein comprising a Kunitz domain peptide and an albumin, useful for preparing a composition for treating a patient with hereditary angioedema or angioedema-related disease, cancer or bleeding disorder.
                                                                                                                        (AVET )
                                                                                                                                                                                                                                                                                                               albumin fusion; Kunitz domain; cytostatic; haemostatic; hereditary angioedema; cancer; bleeding; gene therapy; DPI-14-(GGS)4GG-rHA-(GGS)4GG-DX-890 fusion; mature.
                                                                                                                                                                                                                                                                                                                                                                 DPI-14-(GGS)4GG-rHA-(GGS)4GG-DX-890 fusion mature
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                                                                                                                                                                                                    07-FEB-2003; 2003WO-US003616
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                                                                                                                                                                                                                                                                                         Synthetic
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                                                                                                                                                                            07-FEB-2002; 2002US-0355547P
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                                                                                                                                                                                                                                                                             Unidentified.
                                                                                                               (PYAX-)
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the treatment of e.g. cystic
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                                                  2003-731497/69
                                                                                    H,
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56; Conser
                                                                                                                        AVENTIS BEHRING GMBH.
AVENTIS BEHRING LLC.
DELTA BIOTECHNOLOGY LTD
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LEY A C.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP
                                                                                      Weimer T,
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                                                                                     Romberg
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Pred, No. 2.3e-33;
; Mismatches 0;
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Best Local S
Matches 56
The invention relates to proteins comprising kunitz domain peptide, designated DPI-14 for inhibiting human neutrophil elastase, fused to albumin. The invention is useful for treating cystic fibrosis and relat diseases, hereditary angioedema, cancer and related diseases including chronic obstructive pulmonary disease, asthma, bronchitis, acute respiratory syndrome, pneumonia and bleeding. The invention acts as a cytostatic and haemostatic agent. The present sequence is a mature DPI-(GGS)4 GG-THA-(GGS)4 GG-DX-890 fusion protein. This fusion protein
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                                                                                                                                                                                                                                                                                                                                                  New kunitz domain
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                                                                                                                                                                                                                                                                                                               kunitz domain peptide useful
the treatment of e.g. cystic
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)B; ADR90019.
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56; Conser
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LEY A C.
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                                                                                                                                                                                                                                                               NO 46;
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cancer; chronic obstructive pulmonary disease
ute respiratory syndrome; pneumonia; bleeding;
c; human; rHA synthase gene; human albumin; H
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Pred. No. 2.3e-33;
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Query Match
Best Local Similarity
Matches 56; Conserv
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Best Local :
                                                                                     The invention relates to a novel albumin fusion protein comprising a Kunitz domain peptide or its fragment or variant and an albumin or its fragment or variant. The fusion protein of the invention demonstrates cytostatic and haemostatic activities and may be useful for preparing a composition for treating a patient with hereditary angioedema, an angioedema-related disease, cancer, a cancer-related disease or a bleeding disorder, as well as during gene therapy procedures. The current sequence is that of the albumin fusion protein-related plasmid pDB2300X3 modified NotI expression cassette protein of the invention which has 2 DX
                                                                                                                                                                                                                                             Albumin fusion protein comprising a Kunitz domain peptide and an albumin, useful for preparing a composition for treating a patient with hereditary angioedema or angioedema-related disease, cancer or bleeding disorder.
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(AVET )
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tary angioedema; (
d pDB2300X3 NotI (
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AVENTIS BEHRING LLC.
DELTA BIOTECHNOLOGY LTD.
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100.0%; ilarity 100.0%; Conservative 0;
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AX The invention relates to proteins comprising kunitz domain peptide, designated DPI-14 for inhibiting human neutrophil elastase, fused to albumin. The invention is useful for treating cystic fibrosis and related diseases, hereditary angioedema, cancer and related diseases including chronic obstructive pulmonary disease, asthma, bronchitis, acute respiratory syndrome, pneumonia and bleeding. The invention acts as a cytostatic and haemostatic agent. The present sequence is a pDB2300X3-2xDX-990 fusion protein. This chimeric protein contains two DX-990 proteins, THA synthase gene encoding protein and the linkers. This sequence is used in the exemplification of the invention.
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                                                                                                                                                                                                                                                                                                                                  kunitz domain peptide useful as human neutrophil elastase inhibitor the treatment of e.g. cystic fibrosis and related disease.
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                                                                                                                                                                                                                                      The invention relates to a novel albumin fusion protein comprising a Kunitz domain peptide or its fragment or variant and an albumin or its fragment or variant. The fusion protein of the invention demonstrates cytostatic and haemostatic activities and may be useful for preparing a composition for treating a patient with hereditary angioedema, an angioedema related disease, cancer, a cancer-related disease or a bleeding disorder, as well as during gene therapy procedures. The curre sequence is that of the plasmid pDB2301X-derived DPI-14-(GGS)4GG-rHA-(GGS)4GG-DX-890 fusion precursor protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Albumin fusion protein comprising a Kunitz domain peptide and an albumin, useful for preparing a composition for treating a patient with hereditary angioedema or angioedema-related disease, cancer or bleeding disorder.
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                                                                                             e 329; DB 7;
. No. 2.4e-33;
smatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sleep
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                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                Indels
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                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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RESULT 22
AAR99167
ID AAR99
XX
AC AAR99
XX
DT 12-FE
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ADR90020
                                                                                                                                    밁
                                                                                                                                                       8
                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 56
                                                                                                                                                                                                                                                                            chronic obstructive pulmonary disease, asthma, bronchitis, acute respiratory syndrome, pneumonia and bleeding. The invention acts as a cytostatic and haemostatic agent. The present sequence is a DPI-14-(GGS)4 GG-THA-(GGS)4 GG-DX-890 fusion protein. This fusion protein contains DPI-14 CDNA encoding protein, GS linker region, rHA (human albumin) synthase gene encoding protein and DX-890 encoding protein. This sequence is used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                               The invention relates to proteins comprising kunitz domain peptide, designated DPI-14 for inhibiting human neutrophil elastase, fused to albumin. The invention is useful for treating cystic fibrosis and related diseases, hereditary angioedema, cancer and related diseases including
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (LADN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kunitz domain peptide; cystic fibrosis; cystic fibrosis related dise hereditary angioedema; cancer; chronic obstructive pulmonary disease asthma; bronchitis; acute respiratory syndrome; pneumonia; bleeding; cytostatic; haemostatic; human; rHA synthase gene; human albumin; HA
                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 22; SEQ ID NO 45; 123pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New kunitz domain peptide useful as human for the treatment of e.g. cystic fibrosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DPI-14-(GGS)4 GG-rHA-(GGS)4 GG-DX-890 fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADR90020 standard; protein; 753
                               AAR99167;
                                                         AAR99167 standard; protein; 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-625120/60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ladner RC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-FEB-2003; 2003US-00361997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-FEB-2003; 2003US-00361997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2004171794-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chimeric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-NOV-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADR90020;
                                                                                                                                                                                          Local Similarity
ies 56; Conserv
                                                                                                                                    869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LADNER R C.
LEY A C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADR90019.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DX-890;
                                                                                                                                                    EACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP
                                                                                                                                    EACNIPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 753
                                                                                                                                                                                                                                                    753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ley AC
                                                                                                                                                                                          100.0%; ilarity 100.0%; Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              chimeric.
                                                                                                                                                                                            0,
                                                                                                                                                                                            Score 329; DB 8;
Pred. No. 2.4e-33;
Nismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      neutrophil elastase inhibitor and related disease.
                                                                                                                                                                                                                       Length 753;
                                                                                                                                                                                             Indels
                                                                                                                                                                                            0,
                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        disease;
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12-FEB-1997

(first entry)

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RESULT 23
ADF71967
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Best Local S
                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                 Genetically engineered human derived Kunitz domains can be used to inhibit human neutrophil elastase, an enzyme involved in the elimination of pathogens and the restructuring of connective tissue. In cases of reduction of the circulating alpha-1-protease inhibitor (API or alphal antitrypsin), or the inactivation of API by oxidation (smokers emphysema), extensive destruction of the lung tissue may result from uncontrolled elastolytic activity of human neutrophil elastase. Other respiratory disorders such as cystic fibrosis are thought to be caused by human neutrophil elastase release by neutrophils. The genetically engineered human derived Kunitz domains can be used to treat such respiratory disorders. See AAR99146-R99211
06-JUN-2003; 2003WO-US017665.
                         18-DEC-2003
                                                  WO2003103475-A2
                                                                                                                                          Kallikrein inhibitor related amino acid sequence SEQ ID NO:47.
                                                                                                                                                                   11-MAR-2004
                                                                                                                                                                                             ADF71967
                                                                                                                                                                                                                      ADF71967 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                           Sequence 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 49; 105pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     respiratory disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1996-321851/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ley AC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-DEC-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   smokers emphysema.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             connective tissue; alpha 1 protease inhibitor; API; neutro alphal antitrypsin; respiratory disorder; cystic fibrosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genetically engineered aprotinin-like Kunitz domain
                                                                                                               ischaemia; vasotropic; kallikrein inhibitor; blood loss;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (PROT-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              engineered inhibitors of human neutrophil ce Kunitz domain for treating, e.g. cystic
                                                                                                                                                                                                                                                                                                                                         55,
                                                                                                                                                                                                                                                                                     N
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ladner RC,
                                                                                                                                                                                                                                                                                                      ACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kunitz
                                                                                                                                                                                                                                                                                                                                      98.5%;
ilarity 100.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                           Ą,
                                                                                                                                                                   (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           domain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Guterman SK,
                                                                                                    response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           human neutrophil elastase;
1 protease inhibitor; API; 1
                                                                                                                                                                                                                      56
                                                                                                                                                                                                                                                                                                                                                  Score 324; DB 2; Pred. No. 6.2e-34
                                                                                                                                                                                                                                                                                                                                         0
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                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Roberts BL,
                                                                                                                                                                                                                                                                                                                                                  6.2e-34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 elastase
fibrosis
                                                                                                                                                                                                                                                                                                                                                                 Length 56;
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                                                                                                                                                                                                                                                                                                                                         Indels
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r other
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Best Local S
Matches 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention describes a method (M1) for preventing or reducing ischaemia in a patient. M1 involves administering to the patient a composition comprising a polypeptide (I) having an amino acid sequence of ADF71926 and inhibiting kallikrein. (I) has vasotropic activity, and can be used as a kallikrein inhibitor. (M1) is useful for preventing or reducing ischaemia in a patient such as perioperative blood loss due to a surgical procedure which is cardiothoracic surgery (e.g. cardiopulmonary bypass or coronary artery bypass grafting) performed on the patient. (M1) is also useful for preventing or reducing the onset of systemic
                                                                                                                                                          07-JUN-2002;
28-AUG-2002;
                                                                                                                                                                                                       06-JUN-2003; 2003WO-US017665
                                                                                                                                                                                                                                                                  WO2003103475-A2
                                                                                                                                                                                                                                                                                                                                                                        Kallikrein inhibitor related amino acid sequence SEQ ID NO:48.
                                                                                                                                                                                                                                                                                                                                                                                                     11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                   ADF71968
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADF71968 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      inflammatory response associated with a surgical procedure in a patient which involves administering (I) to a patient. The present sequence is used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Preventing or reducing ischemia in patient involves administering to patient composition comprising a kallikrein inhibitory polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-062190/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-JUN-2002; 2002US-0387239P.
28-AUG-2002; 2002US-0407003P.
                                                                                                Ladner RC,
                                                                                                                                                                                                                                     18-DEC-2003.
                                                                                                                                                                                                                                                                                                                          ischaemia; vasotropic; kallikrein inhibitor; blood loss; systemic inflammatory response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; SEQ ID NO 47; 46pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (DYAX-) DYAX CORP.
                                                                                                                              (DYAX-) DYAX CORP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  l Similarity
55; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            56 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACNIPI VRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ley AC,
                                                                                                Ley AC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98.5%; Score 324; DB 8; I
larity 100.0%; Pred. No. 6.2e-34;
Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                          2002US-0387239P
2002US-0407003P
                                                                                                Hirani S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hirani
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                                                                                                   Williams
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 56;
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Disclosure; SEQ ID NO 48; 46pp; English.

Preventing or reducing ischemia in patient involves administering to patient composition comprising a kallikrein inhibitory polypeptide.

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RESULT 25
AAR99214
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Best Local S
Matches 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention describes a method (M1) for preventing or reducing ischaemia in a patient. M1 involves administering to the patient a composition comprising a polypeptide (I) having an amino acid sequence of ADF71926 and inhibiting kallikrein. (I) has vasotropic activity, and can be used as a kallikrein inhibitor. (M1) is useful for preventing or reducing ischaemia in a patient such as perioperative blood loss due to a surgical procedure which is cardiothoracic surgery (e.g. cardiopulmonary bypass or coronary artery bypass grafting) performed on the patient. (M1) is also useful for preventing or reducing the onset of systemic inflammatory response associated with a surgical procedure in a patient which involves administering (I) to a patient. The present sequence is used in the exemplification of the present invention.
Genetically engineered human derived Kunitz domains can be used to inhibit human neutrophil elastase, an enzyme involved in the elimination of pathogens and the restructuring of connective tissue. In cases of reduction of the circulating alpha-1-protease inhibitor (API or alphal antitrypsin), or the inactivation of API by oxidation (smokers emphysema), extensive destruction of the lung tissue may result from uncontrolled elastolytic activity of human neutrophil elastase. Other respiratory disorders such as cystic fibrosis are thought to be caused by human neutrophil elastase. Release by neutrophils. The genetically
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Aprotinin; Kunitz domain; human neutrophil elastase; hNE; connective tissue; alpha 1 protease inhibitor; API; neutrophil; alphal antitrypsin; respiratory disorder; cystic fibrosis; smokers emphysema.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 56 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Modified Kunitz domain EPI-HNE-3.
                                                                                                                                                                                                                                                                                                                                                                                                                                           New engineered inhibitors of human neutrophil elastase - contg. -like Kunitz domain for treating, e.g. cystic fibrosis or other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1996-321851/32.
N-PSDB; AAT35166, AAT35168.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-DEC-1995;
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                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 68-69; 105pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                            respiratory disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (PROT-) PROTEIN ENG CORP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACNIPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Guterman
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engineered human derived Kunitz domains can be used to treat

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respiratory disorders. See AAR99146-R99211. Fusion genes were used in the production of the Kunitz domain derivatives. Protein expression cassettes are then cloned into the plasmid pHII-D2 using BstBI and EcoRI restriction sites. The cloned sequence is under the transcriptional control of Pichia pastoris aox1 gene promoter and regulatory sequences and downstream polyadenylation and transcription termination sequences. Transformed strains of P. pastoris were used to express the various EPI-HNE proteins derived from the BPII and ITI-D2 Kunitz domains. This sequence is a modified Kunitz domain (EPI-HNE-3) which was expressed from a pHIL-D2 plasmid construct designated pHIL-D2 (MFalphaPrePro::EPI-HNE-3).
Sequence 141 AA;
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ACNLPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 56 ACNIPIVRGPCIAFFPRWAFDAVKGKCVLFPYGGCQGNGNKFYSEKECREYCGVP 141

Query Match Best Local S Matches 55

Local Similarity

98.5%; Score 324; DB 2; ilarity 100.0%; Pred. No. 1.7e-33; Conservative 0; Mismatches 0;

Length 141,

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